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3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
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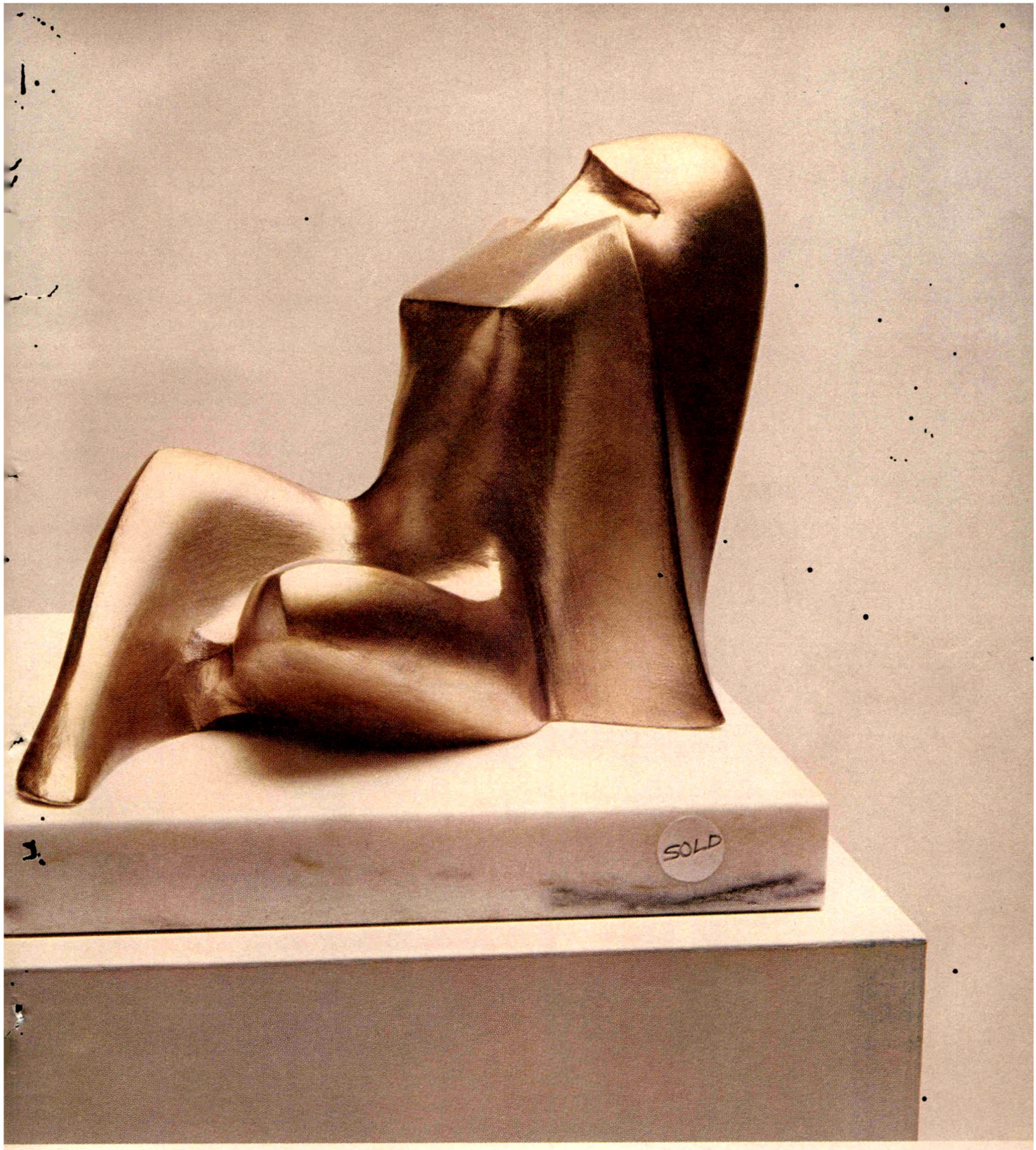
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Actions. Navane is a psychotropic agent of the thioxanthene series. Navane possesses certain chemical and pharmacological similarities to the piperazine phenothiazines and differences from the aliphatic group of phenothiazines. Navane's mode of action has not been clearly established.

Indications. Navane is effective in the management of manifestations of psychotic disorders.

Contraindications. Navane is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias. Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but this possibility should be considered.

Warnings. *Usage in Pregnancy* – Safe use of Navane during pregnancy has not been established. Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus. Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane, there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents. After repeated oral administration to rats (5 to 15 mg/kg/day), rabbits (3 to 50 mg/kg/day), and monkeys (1 to 3 mg/kg/day) before and during gestation, no teratogenic effects were seen. (See Precautions.)

Usage in Children—The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established.

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions. An antiemetic effect was observed in animal studies with Navane; since this effect may also occur in man, it is possible that Navane may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold. Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy, and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis) have been reported with related drugs.

Undue exposure to sunlight should be avoided. Photosensitive reactions have been reported in patients on Navane.

Intramuscular Administration – As with all intramuscular preparations, Navane Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus) and the mid-lateral thigh.

The deltoid area should be used only if well developed, such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions. *Note:* Not all of the following adverse reactions have been reported with Navane (thiothixene). However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness, and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane. These changes are usually reversible and frequently disappear on continued Navane therapy. The incidence of these changes is lower than that observed with some phenothiazines. The clinical significance of these changes is not known.

CNS effects: Drowsiness, usually mild, may occur although it usually subsides with continuation of Navane therapy. The incidence of sedation appears similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane. Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently.

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs.

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudoparkinsonism, akathisia, and dystonia have been reported. Management of these extrapyramidal symptoms depends upon the type and severity. Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: As with all antipsychotic agents tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia: antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear.

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leucocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia.

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Undue exposure to sunlight should be avoided. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria.

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema.

Although not reported with Navane, evidence indicates there is a relationship between phenothiazine therapy and the occurrence of a systemic lupus erythematosus-like syndrome.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex. In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration.

Dosage and Administration. Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Some patients have been successfully maintained on once-a-day Navane therapy.

Usage in children under 12 years of age is not recommended because safe conditions for its use have not been established.

Navane Intramuscular Solution—For Intramuscular Use Only. Where more rapid control and treatment of acute behavior is desirable, the intramuscular form of Navane may be indicated. It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg of Navane Intramuscular administered 2 to 4 times daily. Dosage may be increased or decreased depending on response. Most patients are controlled on a total daily dosage of 16 to 20 mg. The maximum recommended dosage is 30 mg/day. An oral form should supplant the injectable form as soon as possible. It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms. Dosage recommendations for Navane Capsules and Concentrate appear in the following paragraphs.

Navane Capsules; Navane Concentrate—In milder conditions, an initial dose of 2 mg three times daily. If indicated, a subsequent increase to 15 mg/day total daily dose is often effective.

In more severe conditions, an initial dose of 5 mg twice daily.

The usual optimal dose is 20 to 30 mg daily. If indicated, an increase to 60 mg/day total daily dose is often effective. Exceeding a total daily dose of 60 mg rarely increases the beneficial response.

Overdosage. Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma.

Treatment: Essentially symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and Intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures for managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors).

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs. Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor elevating action of these agents and cause further lowering of blood pressure.

If CNS depression is present, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate. Picrotoxin or pentylenetetrazol should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs.

There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

How Supplied. Navane (thiothixene) is available as capsules containing 1 mg, 2 mg, 5 mg, and 10 mg. of thiothixene in bottles of 100 and 1,000. Navane is also available as capsules containing 20 mg of thiothixene in bottles of 100 and 500.

Navane (thiothixene hydrochloride) Concentrate is available in 120 ml (4 oz.) bottles with an accompanying dropper calibrated at 2 mg, 4 mg, 5 mg, 6 mg, 8 mg, and 10 mg. Each ml contains thiothixene hydrochloride equivalent to 5 mg of thiothixene. Contains alcohol, U.S.P. 7.0% v/v (small loss unavoidable).

Navane (thiothixene hydrochloride) Intramuscular solution is available in a 2 ml amber glass vial in packages of 10. Each ml contains thiothixene hydrochloride equivalent to 2 mg of thiothixene, dextrose 5% w/v, benzyl alcohol 0.9% w/v, and propyl gallate 0.02% w/v.

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- helps orient psychiatric patients to their surroundings
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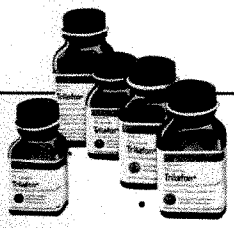
Versatile Dosage	
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Concentrate	16 mg/5 ml, 120 ml bottle
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REPETABS® Tablets 8 mg brand of repeat-action tablets	

Please see next page for prescribing information.



Trilafon®
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For management of schizophrenic and manic disorders in psychiatric hospitals, mental health clinics, and with outpatient treatment



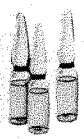
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for maintenance or control of patients in hospital or home

BENEFITS
- generally improve cooperation and communication
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- easily mixes with most liquids
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- usually takes effect in 10 minutes
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REPETABS® Tablets
Concentrate
Injection

CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON **Injection** should not be given to patients in coma or severely depressed states.

WARNINGS **Dosage in pregnancy:** Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenazine should be under medical supervision, particularly if they are receiving high doses. Patients who have had any severe reaction to phenothiazines or to imipramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patients treated with perphenazine, the possibility that they might occur with TRILAFON should be considered: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the visual fields; pigmentation of the retina, cornea, or lens; cerebral edema; polyphagia; photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but not epinephrine, because epinephrine's action is blocked and partly reversed by perphenazine. Severe, acute hypotension has occurred with the use of phenothiazines and is of particular concern in patients with mitral insufficiency or pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic reaction to perphenazine; treatment with perphenazine should be stopped if this occurs.

The antiemetic effect of perphenazine can obscure signs of toxicity due to overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor or intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefore, contact of hands or clothing by those handling perphenazine solutions should be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-system-depressant actions of opiates, antihistamines, barbiturates, and alcohol, less than the usual dosage of these agents is required when they are administered concomitantly with TRILAFON. Patients should be cautioned that their response to alcohol may be increased while they are being treated with TRILAFON.

Phenothiazines also potentiate the effects of atropine, heat, and phosphorus insecticides, and should be used with caution in persons exposed to these agents.

ADVERSE REACTIONS *Extrapyramidal reactions:* dystonia including protrusion, discoloration, aching and rounding of the tongue; tonic spasm of the masticatory muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric crisis, trismus, torticollis, retrocollis, muscle weakness, and aching and numbness of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism; hyperreflexia; and ataxia. The incidence and severity of these reactions usually increase with increased dosage, but have occurred in some patients receiving low dosage. Reduction in dosage or treatment with an antispasmodic agent will usually control extrapyramidal reactions. In some instances, however, these reactions may persist after discontinuation of treatment with perphenazine.

Persistent tardive dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities. There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine, vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

Side effects with intramuscular TRILAFON **Injection** have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON (perphenazine) **Injection** is a rare occurrence.

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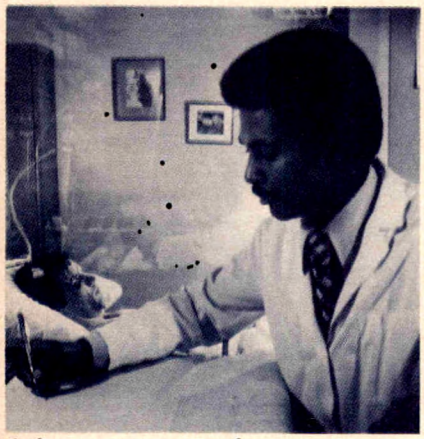
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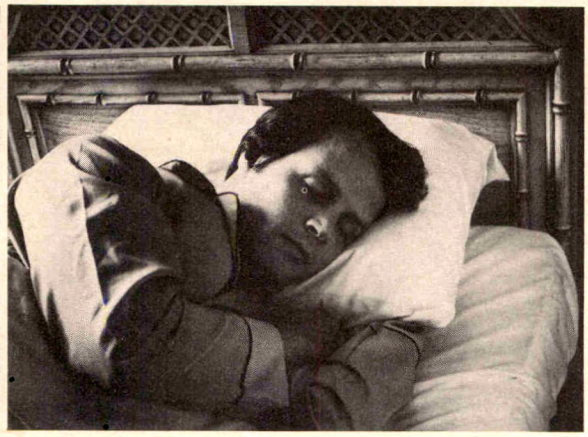
will feature

- **Overview: Psychiatric Sequelae to Multiple Trauma by Nathan Schnaper and R. Adams Cowley**

From the sleep research laboratory:

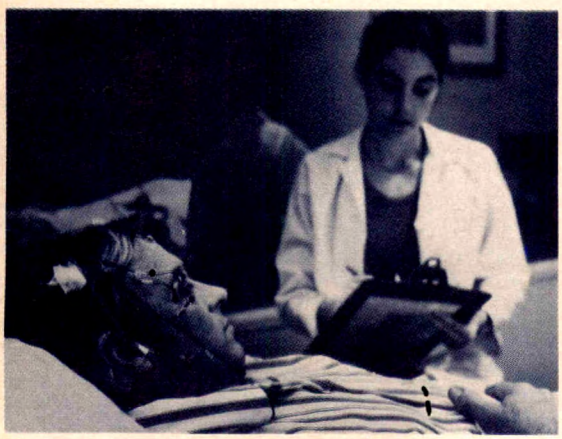
Dalmane® (flurazepam HCl) proved the most effective hypnotic over 14 nights...[1]





14 consecutive nights:
3 in sleep laboratory, 8 at home,
3 in sleep laboratory

...and now, the only one proved effective over 28 nights.[2,3]



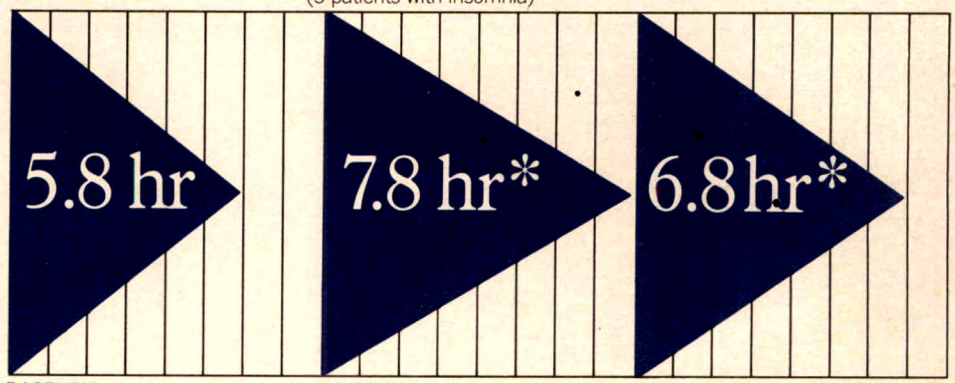


28 consecutive nights:
3 in sleep laboratory, 7 at home,
4 in sleep laboratory, 10 at home,
4 in sleep laboratory[3]

For those patients who need it, Dalmane (flurazepam HCl) alone provides continued effectiveness[2,3]

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But for those patients whose insomnia is a chronic problem, the continued effectiveness of Dalmane is a decided benefit. Even at the end of a 28-night medication period, patients with chronic insomnia were falling asleep faster, spending less time awake during the night, and sleeping substantially longer on Dalmane 30 mg *h.s.* than on baseline placebo nights (average results). This effectiveness was proved[2] and confirmed[3] in two independent sleep research studies using a new 47-night protocol. When similarly evaluated, pentobarbital was ineffective at the end of two weeks.[2]

TOTAL SLEEP TIME (MEAN)[3]
(5 patients with insomnia)



*Significantly increased over baseline placebo ($P<.05$).

In previous studies[1], chloral hydrate and glutethimide lost most or all effectiveness

In fact, continued effectiveness for both inducing and maintaining sleep over 14 consecutive nights[1] has long been an exclusive benefit of Dalmane. No other available sleep agent, including chloral hydrate or glutethimide,[1] has been able to demonstrate such effectiveness in the sleep research laboratory.

The safety record of Dalmane (flurazepam HCl) is well established

Dalmane is relatively safe and well tolerated. Prolonged administration is not generally necessary, but if used repeatedly, periodic blood counts and liver and kidney function tests should be performed.

Dalmane®
(flurazepam HCl)
relatively safe... no need to increase dosage.

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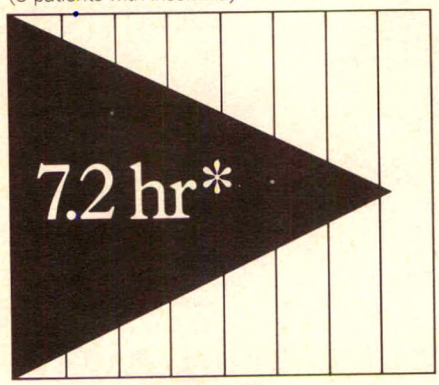
Please see following page for a summary of complete product information.

1,5,7,14,28 nights... as needed, the effectiveness of **Dalmane**® one *h.s.* (flurazepam HCl) C IV meets the challenge of insomnia

One 30-mg capsule *h.s.*—usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

- **Patients fall asleep rapidly, sleep longer on a single *h.s.* dose.**
- **Nighttime awakenings and time spent awake are reduced**
- **Effectiveness maintained without dosage increase from night to night**
- **Patients generally awaken refreshed; morning "hangover" is infrequent**

TOTAL SLEEP TIME (OVERALL MEAN)[3]
(5 patients with insomnia)



DALMANE (flurazepam HCl)
NIGHTS 1-3, 12-14, 26-28

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia of poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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1. Kales A, *et al*: *Arch Gen Psychiatry* *23*:226-232, Sep 1970
2. Kales A, *et al*: *Clin Pharmacol Ther* *18*:356-363, Sep 1975
3. Dement WC, *et al*: Long-term effectiveness of flurazepam 30 mg *h.s.* on chronic insomniacs. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, Jun 30-Jul 4, 1975

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*Significantly increased over baseline placebo ($P < .05$).

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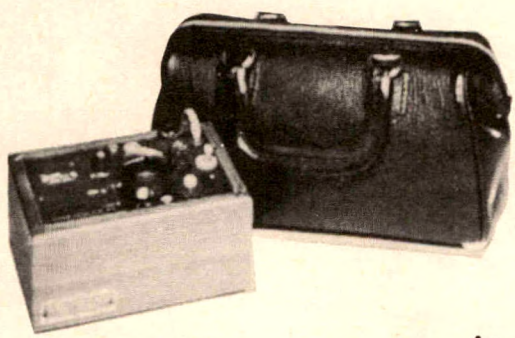
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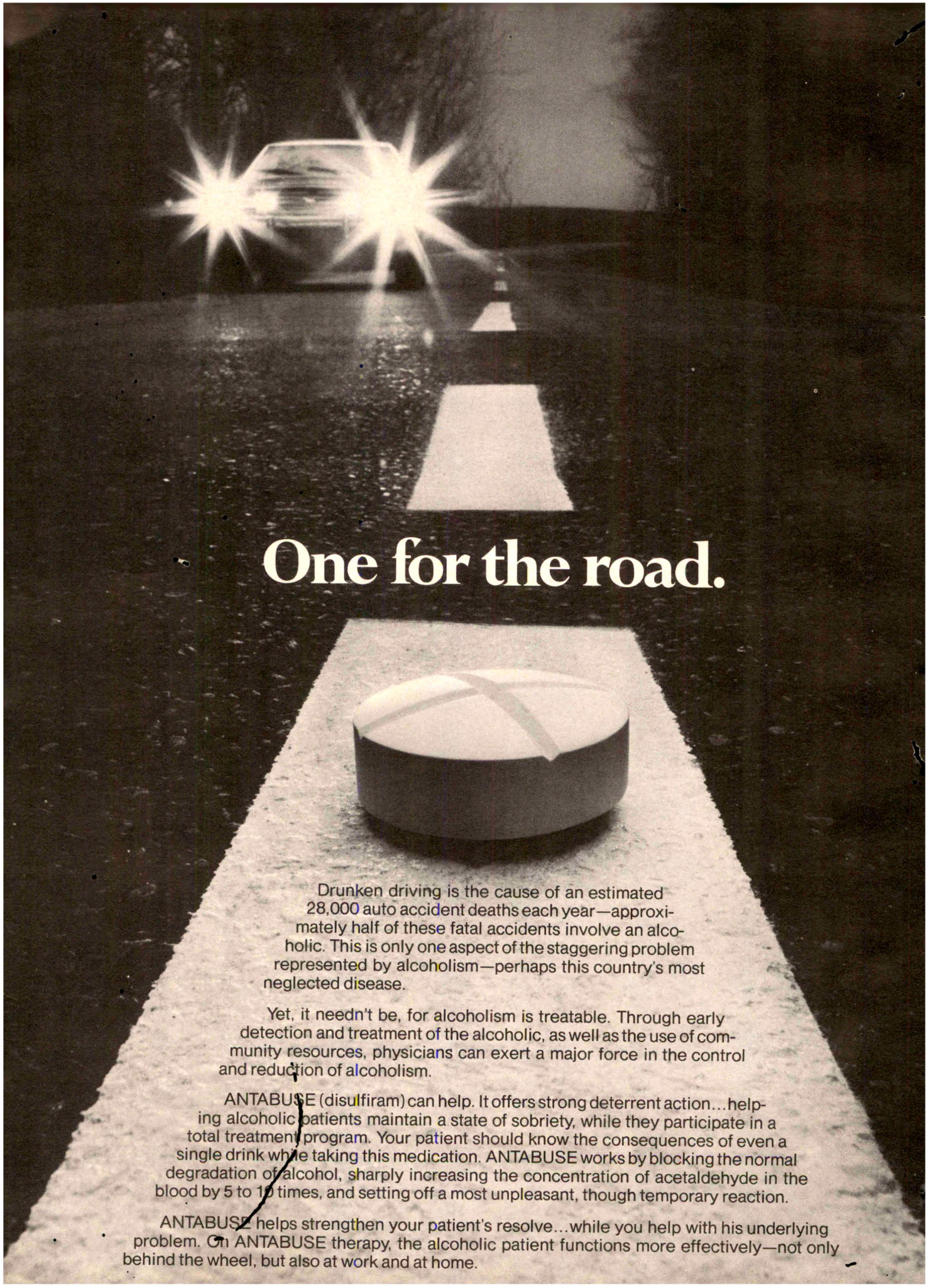
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Drunken driving is the cause of an estimated 28,000 auto accident deaths each year—approximately half of these fatal accidents involve an alcoholic. This is only one aspect of the staggering problem represented by alcoholism—perhaps this country's most neglected disease.

Yet, it needn't be, for alcoholism is treatable. Through early detection and treatment of the alcoholic, as well as the use of community resources, physicians can exert a major force in the control and reduction of alcoholism.

ANTABUSE (disulfiram) can help. It offers strong deterrent action...helping alcoholic patients maintain a state of sobriety, while they participate in a total treatment program. Your patient should know the consequences of even a single drink while taking this medication. ANTABUSE works by blocking the normal degradation of alcohol, sharply increasing the concentration of acetaldehyde in the blood by 5 to 10 times, and setting off a most unpleasant, though temporary reaction.

ANTABUSE helps strengthen your patient's resolve...while you help with his underlying problem. On ANTABUSE therapy, the alcoholic patient functions more effectively—not only behind the wheel, but also at work and at home.

BRIEF SUMMARY
(For full prescribing information, see package circular.)
ANTABUSE® (disulfiram) In Alcoholism
INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)
CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, *e.g.* cough syrups, tonics, and the like, should not be given ANTABUSE.
ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

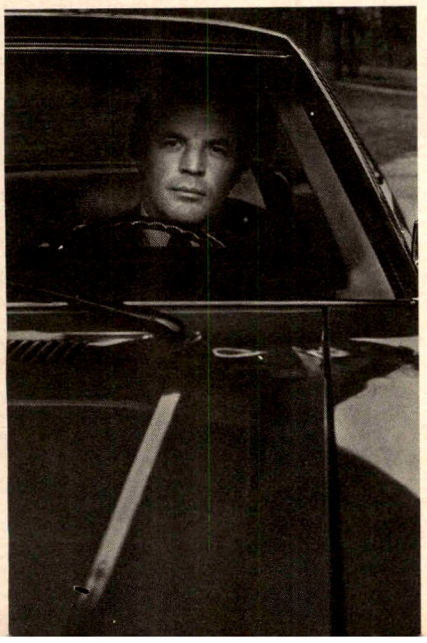
WARNINGS: ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.
The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.
THE ANTABUSE-ALCOHOL REACTION:
ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.
The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.
The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.
DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.
Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.
It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.
Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.
CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.
USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.
PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)
Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.
Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.
ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)
Optic neuritis, peripheral neuritis, and polyneuritis may occur following administration of ANTABUSE.
Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.
In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.
Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.
One case of cholestatic hepatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.
DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.
INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.
MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.
NOTE: Occasional patients, while seemingly on adequate maintenance dose of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.
DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.
TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, such a test reaction should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.
However, where a test reaction is deemed necessary, the suggested procedure is as follows:
After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (1/2 oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.
MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokalemia has been reported.
HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100.
No. 810—Each tablet (scored) contains 500 mg. disulfiram, in bottles of 50 and 1,000. **7626**

Antabuse®

BRAND OF DISULFIRAM

Pharmacologic Deterrent Therapy
Tablets, 250 mg. and 500 mg.



A first step in rehabilitation of the alcoholic

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New York, N.Y. 10017

in clinically significant depression...

penetrating the symptom barrier to productive psychotherapy

symptoms often interfere with therapy

In clinically significant depression, the patient often becomes barricaded behind his own symptoms during psychotherapy. Because these symptoms can be so sharply defined and somatic in expression, he may reject the fact that they are psychic in origin. Sleep disturbance, gastrointestinal complaints, anorexia, chronic fatigue, and other psychosomatic symptoms may so preoccupy—or overwhelm—the depressed patient that truly productive therapeutic sessions are difficult to achieve. Instead of being able to concentrate on the core emotional problems of the depression itself, he may for example go on at length about how broken his sleep is or keep reiterating (while the therapeutic hour slips by) how physically miserable he feels.

ELAVIL®
(AMITRIPTYLINE HCl, MSD)
to help penetrate the symptom barrier in depression requiring medication

ELAVIL, a highly effective tricyclic antidepressant, will often alleviate these symptoms. With the help of ELAVIL, sleep disturbance—so common in clinically depressed patients and often the symptom that distresses them most—as



well as other "barrier symptoms" may be lessened to the point where they no longer come between you and the patient.

psychotherapy takes direction

As these preoccupying complaints are lifted, psychotherapy sessions can become more productive. Patients are enabled to respond more fruitfully during therapeutic hours and to resume or pursue more efficiently the necessary activities in their personal lives.

meeting therapeutic goals

And as the antidepressant activity of ELAVIL (Amitriptyline HCl, MSD) takes hold, it helps relieve the depressive condition itself. Sometimes only a minimum of actual psychotherapy is required. The patient may experience a more rapid recovery—while you conserve valuable time.

Prescribe ELAVIL then, to help lighten the patient's burden in depression—and yours in its management.

ELAVIL should not be used during the acute recovery phase following myocardial infarction; in patients hypersensitive to it; in those who have received an MAOI within two weeks; or in children under 12. Patients with cardiovascular disorders should be watched closely. Its safe use during pregnancy and lactation has not been established. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

TABLETS: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg
INJECTION: 10 mg per ml

ELAVIL®

(AMITRIPTYLINE HCl | MSD)

an antidepressant with an anxiety-reducing sedative component to its action



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For a brief summary of prescribing information, please see following page.

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addendum

ELAVIL®

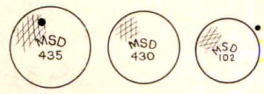
(AMITRIPTYLINE HCl | MSD)

Five tablet strengths for differing patient needs. The variety of dosage strengths available with ELAVIL makes possible great prescribing flexibility.

Once-a-day dosage at bedtime is an appropriate way to start—and maintain—many patients on therapy. The simplicity of this regimen helps improve patient compliance. ELAVIL may also be prescribed in divided daily doses.

A sedative effect may be apparent before the antidepressant effect of ELAVIL is noted. An adequate therapeutic effect may take as long as 30 days to develop.

100 mg
75 mg
50 mg



These tablets may be advantageous when initiating therapy with once-daily bedtime dosage in adult outpatients. The usual starting dosage is 75 mg daily. Therapy may be initiated with 50 to 100 mg daily. This may be increased by 25 or 50 mg as necessary in the bedtime dose to a total of 150 mg per day.

These tablets may also be convenient for many hospitalized patients. These patients may need 100 mg a day initially which can be increased gradually to 200 mg a day if necessary. A small number of such patients may need as much as 300 mg a day.

25 mg 

This tablet may prove useful when initiating therapy with divided daily doses in adult outpatients. Starting dosage is usually 75 mg daily. If necessary, this dosage may be increased gradually to a total of 150 mg a day. Increases are made preferably in the late afternoon or bedtime doses.

10 mg 

Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher doses.

NOTE: The usual maintenance dosage of ELAVIL is 50 to 100 mg per day which may be given in a single dose preferably at bedtime. In some patients 40 mg per day is sufficient. This drug is not recommended for patients under 12 years of age.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure; in patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child. Not recommended for patients under 12 years of age.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required; paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported. Use with caution in patients with impaired liver function.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue, rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; tablets containing 75 mg and 100 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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July 1976

A Journal of the American Psychiatric Association

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LOXAPINE HYDROCHLORIDE

Lederle

25 mg base/ml* In bottles of 4 fl. oz.

Effectiveness – the only clue that it's there

DESCRIPTION

*Each ml contains the equivalent of 25 mg loxapine base as the HCl.

LOXITANE *loxapine*, a dibenzoxazepine compound represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f][1,4]oxazepine. It is present in the oral concentrate primarily as the HCl.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1 1/2 to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE C *loxapine hydrochloride* is indicated for the manifestations of schizophrenia.

LOXITANE has not been shown effective in the management of behavioral complications in patients with mental retardation.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

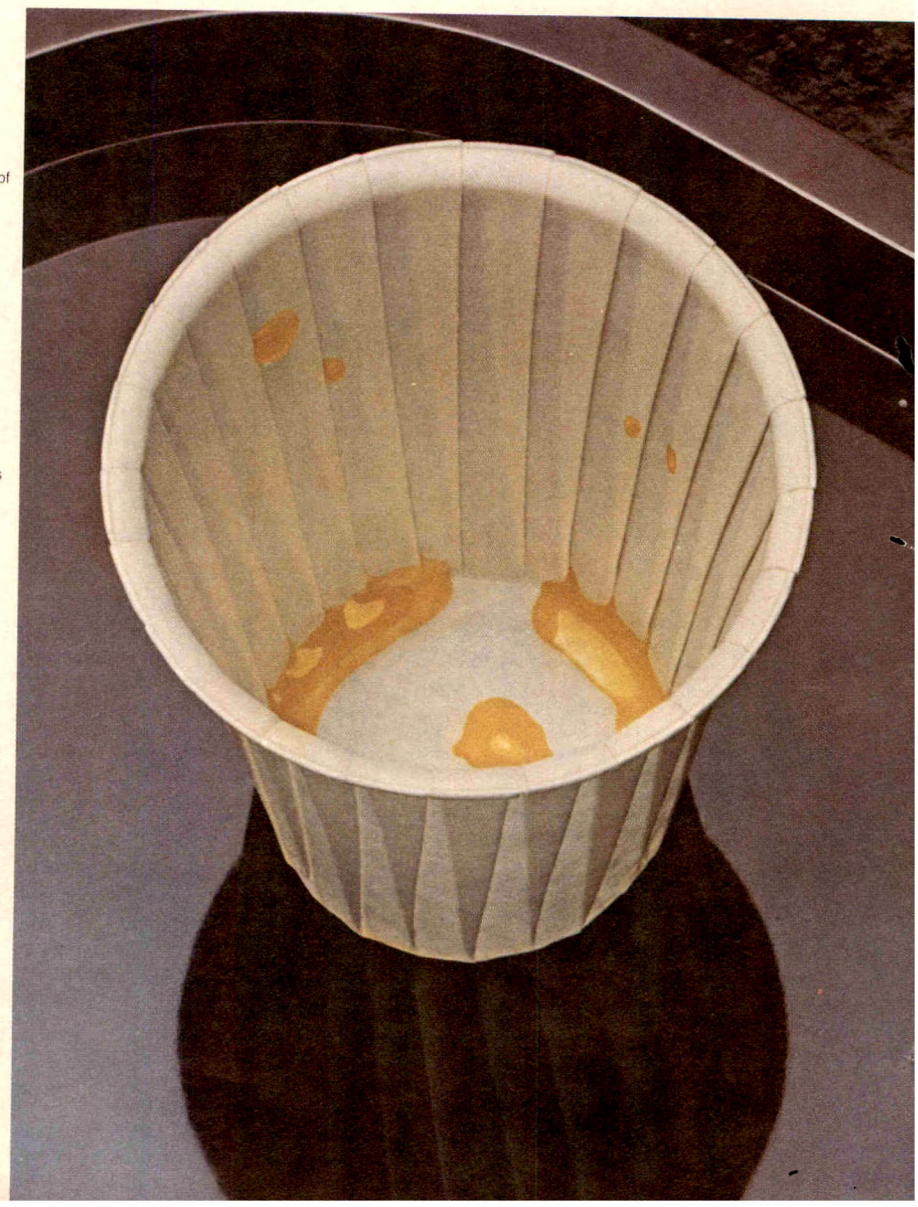
Usage in Pregnancy: Safe use of LOXITANE C *loxapine hydrochloride* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE C *loxapine hydrochloride*, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (e.g, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.



Tasteless in orange, grapefruit and pineapple juices

Highly acceptable to patients who prefer medication in fruit juices, and a logical alternative to tablets or capsules when good patient management depends on uninterrupted treatment. LOXITANE C Oral Concentrate is as easy to take as the fruit juice in which it may be administered.

Same efficacy as LOXITANE Capsules

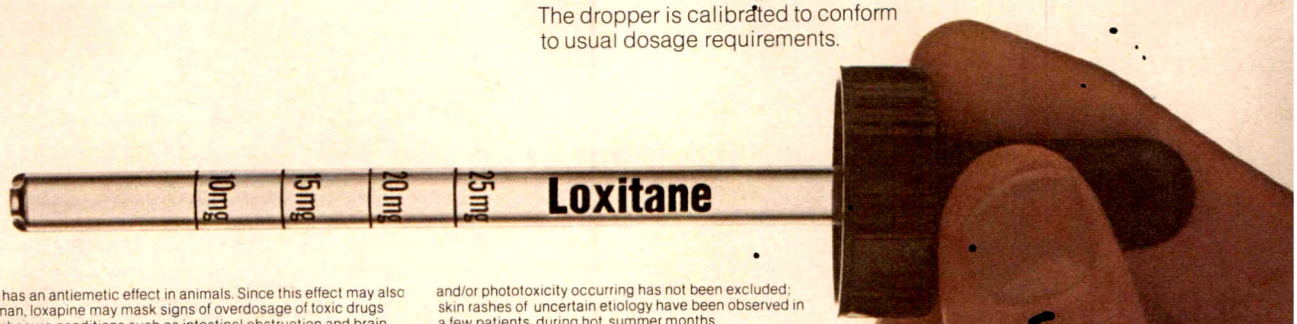
Efficacy that speaks for itself with substantial reduction in the symptoms of schizophrenia.

Same favorable side effects profile as with LOXITANE Capsules[1]

In 31 studies involving 469 schizophrenic patients, certain favorable trends were exhibited in the LOXITANE side effects profile; these require further tests and broader clinical experience for confirmation.[1]

Same daily dosage schedule as with LOXITANE Capsules

The dropper is calibrated to conform to usual dosage requirements.



Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects: Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE C *loxapine hydrochloride* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy,especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensivitity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

DOSAGE AND ADMINISTRATION

LOXITANE C *loxapine hydrochloride* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

LOXITANE C Oral Concentrate should be mixed with orange or grapefruit juice shortly before administration.

Use only the enclosed calibrated (10 mg, 15 mg, 20 mg, 25 mg) dropper for dosage.

HOW SUPPLIED

LOXITANE C *loxapine hydrochloride* is supplied in bottles of 4 fl. oz. (120 ml) with calibrated dropper. Each ml contains the equivalent of 25 mg loxapine base as the HCl. Rev 4/76

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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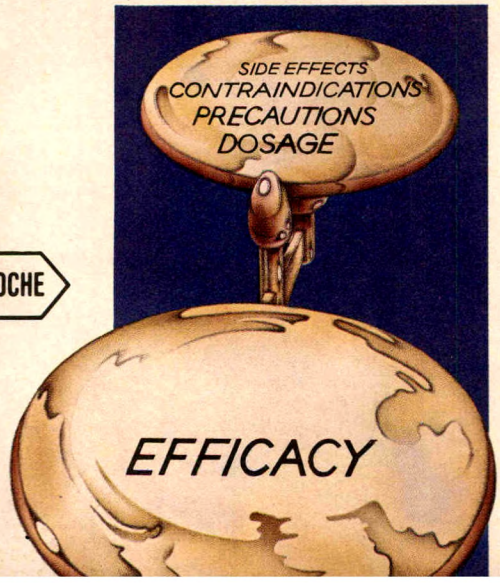
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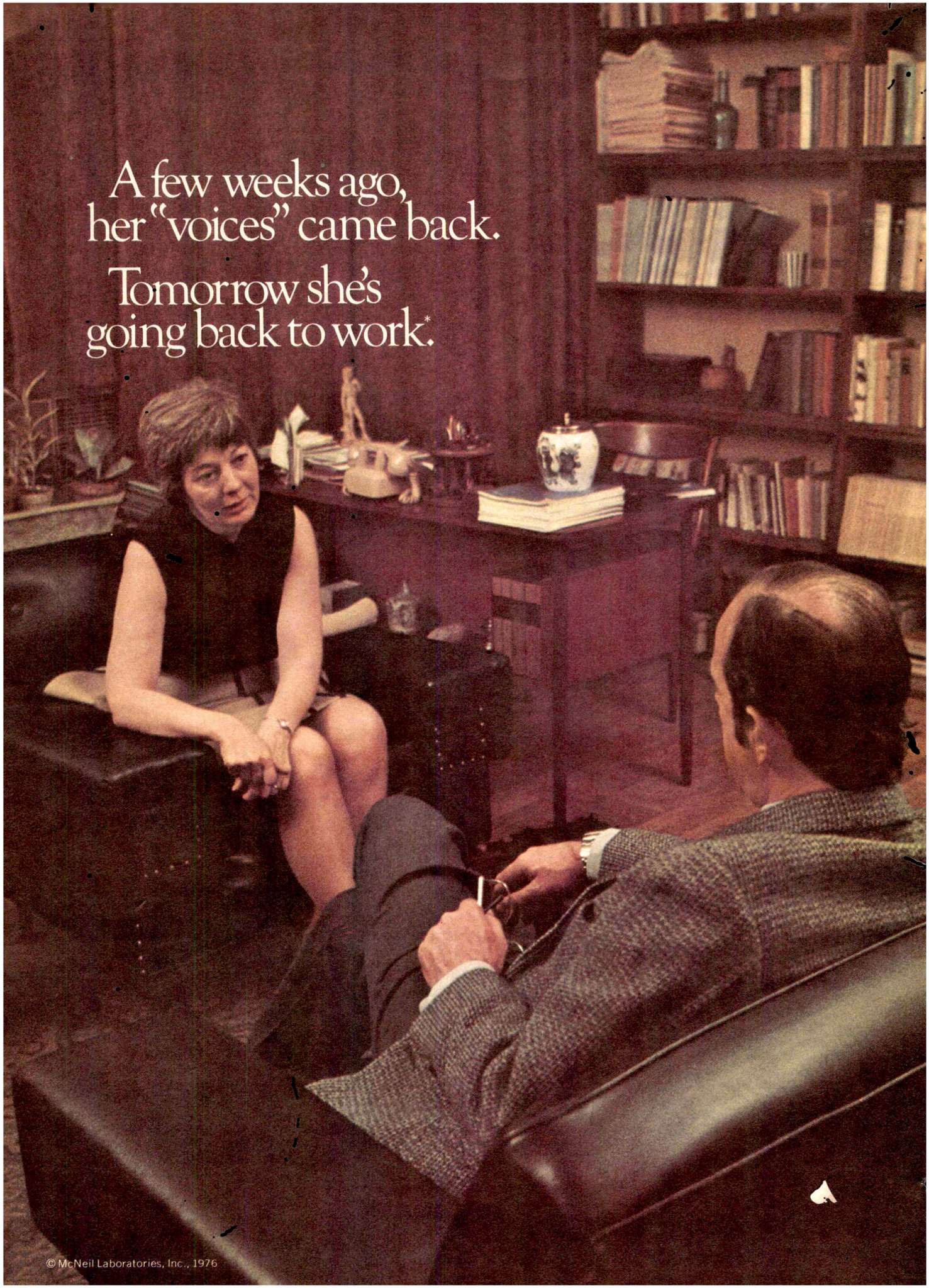
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Highly effective in a wide range of psychotic symptoms[1-7]
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*Not an actual case history, this situation illustrates the action of HALDOL haloperidol as reported in various clinical studies (available on request).

Reduces risk of certain troublesome reactions.[1,2,4-6]
Transient hypotension occurs rarely and severe orthostatic hypotension has not been reported. Marked sedation is rare, although some instances of drowsiness have been reported. In addition, with chronic use, it is unlikely to cause hepatic damage, serious hematologic reactions, photosensitivity reactions and skin rashes...and has minimal effect on renal function.

Please turn page for information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions.

Important: Full directions for use should be read before HALDOL haloperidol is administered or prescribed.



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Contraindications: HALDOL haloperidol is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy:*** Safe use of HALDOL haloperidol in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of haloperidol orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children: Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General: Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL haloperidol, decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL haloperidol may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL haloperidol should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, epinephrine should not be used since HALDOL haloperidol may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL haloperidol may lower the convulsive threshold. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant antiparkinson medication is required, it may have to be continued after HALDOL haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including antiparkinson agents, are administered concomitantly with HALDOL haloperidol. When HALDOL haloperidol is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose-related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of antiparkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Persistent Tardive Dyskinesia*—Tardive dyskinesia may appear during long-term therapy or after therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear irreversible. There is no known effective treatment. All antipsychotic agents should be discontinued. The syndrome may be masked by reinstitution of drug, increasing dosage, or switching to a different antipsychotic agent. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL haloperidol is administered or prescribed. 9/74

References:

1. Man, P.L.: Dis. Nerv. Syst. *34*:113 (Feb.) 1973. **2.** Ayd, F.J., Jr.: Med. Sci. *18*:55 (Oct.) 1967. **3.** Rapp, M.S.: Can. Psychiatr. Assoc. J. *15*:73 (Feb.) 1970. **4.** Howard, J.S.: Dis. Nerv. Syst. *35*:458 (Oct.) 1974. **5.** Gerle, B.: Clin. Trials J. *3*:380 (Feb.) 1966. **6.** Abuzzahab, F.S., Sr.: Psychosomatics *11*:188 (May-June) 1970. **7.** Darling, H.F.: Dis. Nerv. Syst. *34*:364 (Oct.-Nov.) 1973.

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For Brief Summary, please see following page.

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Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides; carefully consider benefit versus risk in less severe disorders. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy, observed primarily in patients receiving larger than recommended doses, is characterized by diminution of visual acuity, brownish coloring of vision, and impairment of night vision; the possibility of its occurrence may be reduced by remaining within recommended dosage limits. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; rarely, nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—Rare cases described as parotid swelling. The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia. *Persistent Tardive Dyskinesia*—Persistent and sometimes irreversible tardive dyskinesia, characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and sometimes of extremities may occur on long-term therapy or after discontinuation of therapy, the risk being greater in elderly patients on high-dose therapy, especially females; if symptoms appear, discontinue all antipsychotic agents. Syndrome may be masked if treatment is reinstituted, dosage is increased, or antipsychotic agent is switched. Fine vermicular movements of tongue may be an early sign, and syndrome may not develop if medication is stopped at that time. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea; systemic lupus erythematosus-like syndrome.

Dosage: Dosage must be individualized according to the degree of mental and emotional disturbance, and the smallest effective dosage should be determined for each patient. In adults with depressive neurosis the usual starting dosage is 25 mg t.i.d. and the dosage ranges from 10 mg b.i.d. to q.i.d. in milder cases to 50 mg t.i.d. or q.i.d. for more severely disturbed patients; the total daily dose ranges from 20 mg to a maximum of 200 mg.

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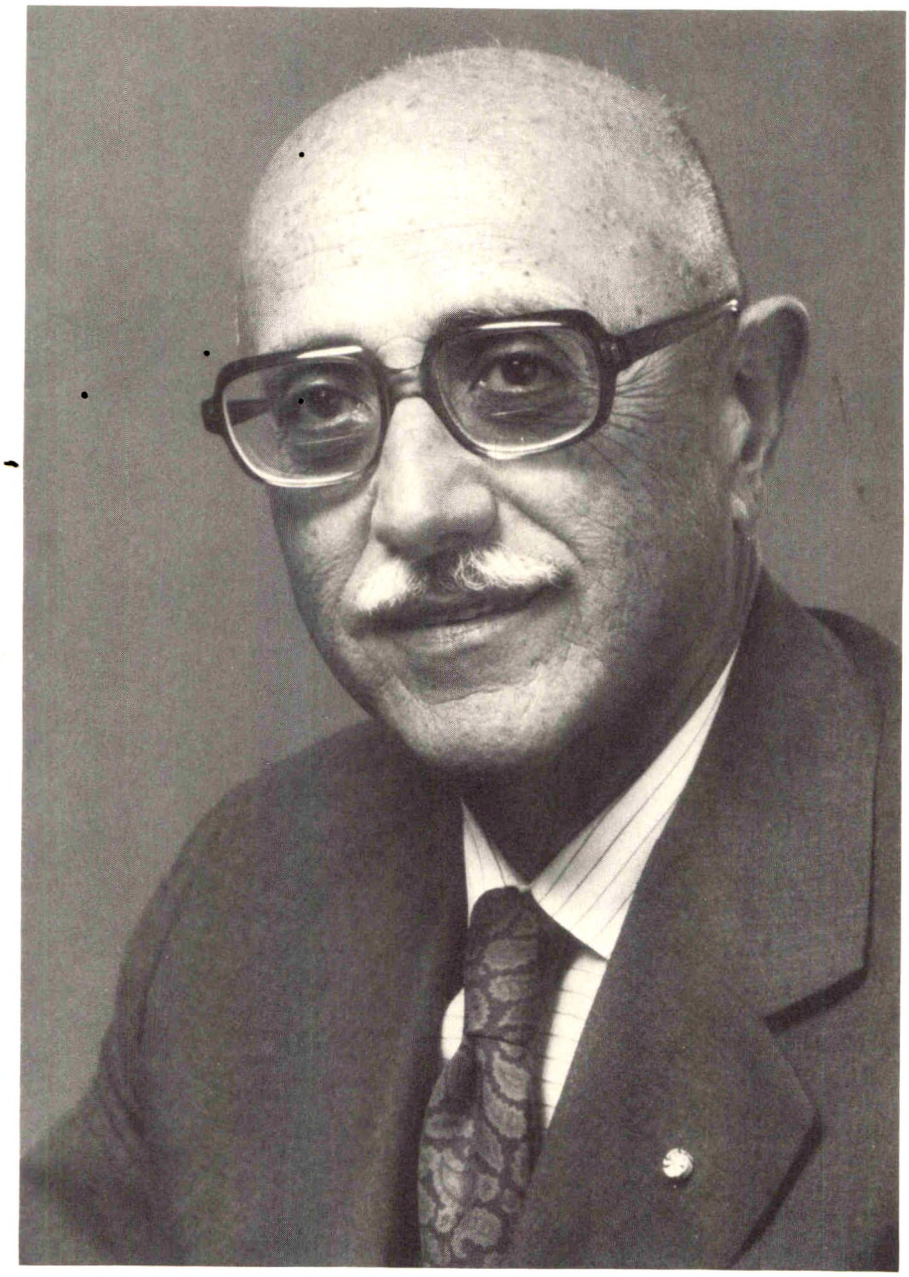
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JUDD MARMOR, M.D.

Presidential Address: Psychiatry 1976—The Continuing Revolution

BY JUDD MARMOR, M.D.

As WE MEET here in this 200th year since our founding fathers declared their independence from colonial rule, we take pride in the fact that one of the signers of that historic Declaration was Benjamin Rush, the physician whom we honor as the father of American psychiatry. A perceptive statement that he made after the War of Independence had been won, namely, that although the war was over, the revolution was not and that the struggle to achieve its ultimate goals had to continue, has provided the theme for our meeting this year. In our context, "The Continuing Revolution" implies that despite the progress we have made, the struggle to control and eliminate mental illness is a continuing one. In the remarks that follow I shall try to explore some of the ramifications of this theme in four major areas: 1) the internal affairs of our Association, 2) our external relationships, 3) the theory and practice of our discipline, and finally, 4) some aspects of the contemporary American social scene.

INTERNAL AFFAIRS

With regard to internal affairs, we continue to grow in both size and complexity. When I joined the APA in 1939 our membership was in the neighborhood of 2,200. Today it is more than 10 times that number and represents 90% of all of the psychiatrists in the United States. We have expanded our ranks to include psychiatric residents as Members-in-Training, and they are playing an increasingly important role in our organization. In the past year we have also extended membership to first-year psychiatric residents, who for the first time will now be able to enter our Association as Provisional Members.

Thirty years ago the entire budget of the American Psychiatric Association was $60,000 a year. Our 1976 budget is well over 5 million dollars, reflecting not only the increase in the size of our membership but also the enormous expansion of the activities of our Association in our efforts to deal with the growing number of scientific, educational, and clinical issues confronting us. Like other organizations we have been beset by the extraordinary inflationary pressures of the past several years, and we have tried assiduously to eliminate overlapping, duplication, and wastefulness wherever possible. We have been greatly assisted in these efforts by our new Deputy Director for Business Administration, Jack White, who has made a tremendous contribution toward putting the Association's affairs under sound fiscal management.

We place no premium on expansion as a value in and of itself, but the increased demands on our Association in a variety of areas have mandated an inevitable growth. New staff personnel are being added in the areas of education and peer review, and our Department of Government Relations has been expanded to enable us to respond more effectively to state and national legislative proposals in the area of mental health. To facilitate these latter efforts the Board of Trustees and the Assembly of District Branches have established a Joint Commission on Government Relations, consisting of a chairman and seven Area Council members, each of whom is in communication with a network of representatives in the district branches. Despite its necessarily limited budget, this joint commission is operating with increasing efficiency and has improved our efforts to keep abreast of legislative issues affecting the mental health field at the local and state as well as the national level.

Upon the strong recommendation of the Assembly of District Branches, a new Council on Children, Adolescents, and the Family has been created; it will give

Presented at the 129th annual meeting of the American Psychiatric Association, Miami Beach, Fla., May 10–14, 1976.

Dr. Marmor was 104th President of the American Psychiatric Association, 1975–1976. He is Franz Alexander Professor of Psychiatry, University of Southern California School of Medicine, Los Angeles, Calif. 90033.

needed emphasis to an important sector of our discipline that is so relevant to the preventive aspects of psychiatry.

Our district branches now number 70, with our latest addition being that of Puerto Rico. As we meet here just across the water from this newest district branch, I extend to these colleagues our warmest welcome. We are looking forward with pleasure to the excellent postconvention meeting in San Juan that they have helped to arrange.

The most important internal activities in our Association during the past year have been the efforts to broaden its democratic base in accord with the historic conference that took place in Key Biscayne more than a year ago. The impetus for this conference stemmed from a strong wish to increase the degree of grassroots participation in the affairs and decisions of our Association. Two major mandates issued from the conference: to democratize the structure of the Assembly of District Branches so that members could be more involved in choosing their geographical representatives and influencing their policies, and in line with this change, to then transfer much of the decision-making power of the Association from the Board of Trustees to the Assembly of District Branches. Toward these goals, a joint ad hoc committee of the Board and the Assembly, together with members of the Constitution and By-Laws Committee, held a series of meetings over the past year during which they laboriously evolved a new constitution that will begin to fulfill the Key Conference mandates. However, those of us who have participated in this exciting process do not delude ourselves into thinking that we have arrived at a final answer. The interim document we have produced will need further revisions and adjustments. But it does constitute a significant effort toward making possible greater participation by our membership in the affairs of our Association and as such is an important developmental step in our continuing revolution.

As a final comment about our internal APA structure, I must express my deep regard and warm appreciation to our Medical Director, Melvin Sabshin, and the entire APA Central Office staff. I have never met a more dedicated, harmonious group of individuals anywhere; the work of this Association could not begin to be accomplished without the efforts that they continually make above and beyond the daily demands of duty.

EXTERNAL RELATIONSHIPS

Turning now to our external relationships, one of the major issues that has preoccupied us in recent years has been the imminence of some form of national health insurance and our concern that such a program might not include adequate psychiatric coverage. At this juncture it does not seem likely that a national health insurance bill will be passed this year. Nevertheless, our efforts to provide our legislators with some of the hard data that they are looking for have met with partial success in that all bills now under consideration in Congress include some degree of mental health coverage. Our goal is to achieve equal and nondiscriminatory coverage for mental disorders, and we are persevering in efforts toward that end. With the help of the late Louis Reed and of Evelyn Myers and Patricia Scheidemandel of the APA staff we have been able to present data indicating that with essentially unrestricted health insurance coverage, mental health costs tend to level off at about 7% of total medical expenditures. We believe, therefore, that such coverage is not only actuarially feasible but also economically desirable, particularly if we bear in mind the direct and indirect costs of failing to cover mental health services. We are fortunate that our incoming President is unusually well informed about these matters, and I am confident that Robert Gibson will contribute significantly to our continuing efforts in this area.

We have also been concerned that such programs should not discriminate, as some presently do, against the private practitioner of psychiatry. We are convinced that the mental health needs of the American people will best be served by a pluralistic approach to the delivery of mental health care. I was pleased to participate during this past year in a national study of private psychiatric office practice, conducted under the auspices of the Joint Information Service of the APA and the National Association for Mental Health (1). This study called forth from Senator Edward M. Kennedy a comment that the data presented in it would allay the fears of those who have been haunted by the spectre of the catastrophic costs of private psychiatric services and will make it possible "to write a better coverage of private psychiatric care into national health insurance proposals" (1, p. 152).

The ultimate arrival of national health insurance will of course bring new challenges and responsibilities to our profession, and we are in the process of tooling up for them now. The key concept with which we must come to grips in the days ahead is that of accountability. The public is justly demanding this of all professionals and legislators alike. For us this means issues such as peer review, the preservation of confidentiality, questions of certification and recertification, continuing education, and the maintenance of high ethical standards. The officers of your Association, in coordination with the APA Central Office, have continued to pursue each of these areas vigorously. It should be noted, however, that these issues involve more than just encoded standards or external constraints on our ability to practice our profession. In the final analysis there can be no substitute for a high sense of *internal* responsibility that impels us to want to do our very best for our patients. Roger Masters and William May, in a recent issue of the *Hastings Center Report* (2, 3), both commented on the denigration of medical practice when it is treated—as it is more and more coming to be treated by our courts and by certain segments of the public—as just a contractual arrange-

ment between patient and physician. As May cogently put it, such an approach "reduces everything to tit-for-tat; do no more for your patients than what the contract calls for; perform specified services for certain fees and no more." What gets lost in this approach is what May called "the sense of covenant"—the feelings of mutual obligation, concern, and trust between patient and physician that transcend legalistic considerations. If these are lost then surely both we and our patients will be the poorer for it.

Given such a sense of covenant, the obligation that we all have to keep up with the rapidly expanding frontiers of knowledge in our field becomes an internal as well as an external mandate. I am particularly pleased that this year we have begun an important new program of continuing education in our convention proceedings, with 24 special courses being presented on a wide variety of topics. The overwhelming registration for these courses indicates that this program has evoked a strong positive response from our members, and it is my hope that the courses will become a permanent feature of our annual meeting and will be expanded even further in the years ahead.

Another important area of our external relationships is our effort to serve as an "ombuds-organization" on behalf of the mentally ill in our country. The Commission on Judicial Action of the APA, under the exemplary leadership of Alan Stone, has played an increasingly important role in this area of our activities. We are particularly concerned about the increasing trend toward governmental and judicial intrusion into areas of therapeutic judgment that we consider to be purely matters of medical responsibility. We believe this intrusion, however well motivated, is not in the best interests of the patient. We try to intervene selectively in situations where we feel that the issues are major, and we have had the satisfaction of knowing that in most instances our amicus curiae briefs have been quite influential.

The problem of the chronically mentally ill and of providing them with satisfactory hospital care as well as good aftercare continues to trouble us greatly. One of our major concerns in this area has been to protect the right to treatment of these patients and to put the responsibility for providing them with more adequate care where it belongs—on the shoulders of the legislative bodies that determine mental health funding, rather than on the psychiatrists who work under great difficulties and handicaps in understaffed and underfinanced facilities. It is true that psychiatrists in general have not placed a high enough priority on working in the institutions that treat the chronically mentally ill, but this is at least in part a consequence of the fact that opportunities for doing the kind of work that would be mentally and emotionally rewarding are lacking in so many of these facilities. This issue of the care of the chronically mentally ill will be explored more fully during the coming year in a special APA conference that is being organized under the direction of John Spiegel.

Still another basic issue confronting our profession is that of the conflictual role of the psychiatrist in situations where his therapeutic responsibility to the patient clashes with certain institutional demands. This issue is particularly distressing with regard to the psychiatric treatment of political offenders in the Soviet Union, but it is by no means confined to that country. In our own nation, as well as in others, such conflicting role demands are confronted by psychiatrists working in military organizations, mental institutions, prisons, schools, and the legal system, as well as other settings. Toward the goal of exploring the ramifications of this important and troublesome problem and possible solutions to it, we are in the process of organizing an interdisciplinary conference of experts in this area; we hope it will convene late this year or early next year.

We have persevered in our efforts to maintain communication with allied professions in the mental health field throughout the past year. Periodic meetings have been held with representatives of clinical psychology, social work, and psychiatric nursing, together with the National Association for Mental Health (representing the public). Although progress has sometimes been slow, we consider it of great importance to persist in the attempt to more clearly delineate our respective areas of professional responsibility. We are firmly convinced that there are areas in the field of mental disorder where the training of the psychiatrist is indispensable. The prescribing of medication and the ruling out of organic factors can be done only by someone who is medically trained. On the other hand, once it is clear that only psychotherapy is indicated, it would go contrary to logic and experience to insist that psychotherapeutic help cannot also be adequately given by the properly trained clinical psychologist, psychiatric social worker, or psychiatric nurse. We expect, however, that these allied professions will take the same kind of steps we have been taking to maintain high professional and ethical standards through continuing education, peer review, certification, and recertification.

Our concern with the attacks to which our profession has been subjected has led us during the past year to transform our Committee on Public Information into a Joint Commission on Public Affairs, reporting to both the Board and the Assembly. Ultimately it is hoped that this joint commission will develop a network similar to our government relations network that will enable us to coordinate our efforts and deal promptly at both the local and national levels with issues affecting the public image of our profession.

Finally, we have continued in the past year to maintain and foster our international relationships with colleagues in other countries. The APA, together with the Australia-New Zealand College of Psychiatrists, jointly sponsored the First Pacific Conference of Psychiatry last year in Melbourne, Australia; about 40 nations from around the Pacific basin participated. It was a successful and fruitful meeting, and we look forward to the next one, scheduled for 1980 in Manila. We are

hosting the Sixth World Congress of the World Psychiatric Association in Hawaii late next summer, and we are also cosponsoring the meeting of the World Federation for Mental Health that will be taking place in Vancouver a week earlier.

THE THEORY AND PRACTICE OF PSYCHIATRY

I turn now to the scientific development of our discipline. Compared with most other medical specialties, psychiatry has often been considered vague in its theories, imprecise in its practices, and unpredictable in its therapeutic effects. I believe it is fair to say, however, that enough advances have been made in all three of these areas in recent decades to justify our claim to be accepted as an equal partner with other medical disciplines in the corridors of science. For much of this twentieth century, psychiatry was strongly influenced by the theories and practices formulated by Sigmund Freud. During the thirties, forties, and fifties the impetus of psychoanalytic insight indeed brought a fresh sense of vitality to our field. It constitutes no disrespect to Freud's genius, however, to state that some of his theoretical concepts and therapeutic precepts have been superseded by newer understandings and developments in the behavioral sciences. Sexual or libidinal needs are no longer viewed as the primary sources of human motivation, nor are sexual frustrations or conflicts seen as the major sources of mental disorder, although their importance is by no means discounted.

The emphasis in contemporary behavioral therapy is on *growth and adaptation*—on how the organism from its earliest life adapts to the signals or stimuli that it receives both from within and without. The process of adaptation is seen as a continuous one, each developmental period building on the information and models acquired in the earlier ones. Psychological developmental periods are now seen as depending not on shifts of hypothetical libidinal energy from one erogenous zone to another, but rather on the sequential way in which the growing organism achieves more complex patterns of coordination, cognition, emotion, and psychological model building. Instead of instinctual drives seeking tension release, we now think in terms of inherited organ systems that mediate various behavioral patterns. The activation and inactivation of these inborn behavioral systems occur through neurohumeral mechanisms, the complexity of which is gradually being clarified and understood. The central nervous system functions as a dynamic cybernetic apparatus guiding and controlling behavioral reactions by a continuous process of information feedback from within and without the organism. The brain is seen as a spontaneously active organ that receives and integrates these data and transmits signals, rather than energy, to initiate actions and reactions.

Another major change that has been taking place in psychodynamic thinking has been a shift from the essentially closed system of the individual psychoanalytic model to an open system model in which the individual's functioning is examined in the context of his total group or field situation. As a consequence, the locus of psychopathology is no longer sought solely within the psyche of the individual but rather in his total system, encompassing biological and genetic determinants as well as his familial, group, and community relationships.

Considerable advances have been made in the last several decades in the understanding of the biochemistry of the neuroregulatory agents of the central nervous system. Interdisciplinary research between psychiatric clinicians and biochemists has given strong indication that metabolic derivatives of these neuroregulatory agents, particularly the catecholamines and indoleamines, may play a significant role in the pathogenesis and pathophysiology of schizophrenic and affective disorders. The answers are still far from definitive, and intensive research continues. But we do know that some of these metabolic by-products are capable of causing hallucinations and facilitating delusional states and that others clearly affect mood states. We know that their production is influenced by stress but also that genetic predispositions play a role. Thus, present indications point in the direction of an interplay of genetic, biochemical, and psychosocial factors in these major psychiatric disorders. It may well be that schizophrenic and manic-depressive patterns of behavior, and perhaps others also, are triggered by adverse and stressful interpersonal experiences in individuals who are susceptible due to genetically determined biochemical abnormalities in their neuroregulatory processes.

There have been important biological advances in many other areas also—in sleep research, in circadian rhythms, in genetics, in mental retardation, in the biological basis of memory and learning, in biofeedback and the control of involuntary functions, in infant and child development, and in the psychology of aging. However, in the interest of time I shall move on to another facet of our evolving field, namely, the revolutionary changes that have been taking place in psychiatric treatment methods.

The modern mental hospital has changed so markedly from its predecessors that it is hardly recognizable as part of the same tradition. Open doors instead of locked ones on most units, patients involved in various recreational and occupational activities and group meetings instead of interminably polishing gloomy ward floors, bright and cheerful rooms and lounges with curtains on the windows and pictures on the walls instead of barred windows and dark, cheerless hallways—these and many other contrasts illustrate the enormous strides toward a more humane and rational therapeutic milieu that have taken place over the past several decades in American psychiatry. Equally importantly, the biochemical advances to which I have referred have made possible certain pharmacological therapies that have strikingly reversed the need for

long-term mental hospitalization in many instances. In the schizophrenias, the depressions, and the manic disorders, these new pharmaceuticals have dramatically reduced the length of hospital stays for many patients from months or years to periods ranging from two to four weeks for most of them. Reflecting this change, the number of patients in state and county mental hospitals in the United States has dropped significantly in the past 20 years despite an increased rate of admissions and a rise of 20 million in the general population.

This is not to imply that these patients are all leaving the hospital "cured." After their discharge from the hospital, many will continue to require treatment in outpatient facilities or transitional settings such as halfway houses or day centers, of which, incidentally, we do not have nearly enough. Under such conditions, however, they are more likely to maintain family ties, participate in social and community life, and return to some level of economic productivity. Moreover, the medication that they continue to receive renders them more amenable and accessible to the ongoing psychotherapeutic efforts that are often necessary to enable them to cope with the stresses that may be present in their life situations. As Gerald Klerman cogently demonstrated in a recent study (4), psychotherapy and pharmacotherapy in such cases, far from being contradictory techniques, are complementary and mutually reinforcing.

Parenthetically, one area in which we are still woefully deficient is that of work therapy for hospitalized and posthospitalized patients. Although occupational therapy as presently available is useful, there is strong evidence to suggest that providing meaningful work, with compensation, would contribute more effectively to the social and psychological rehabilitation of many patients. In this respect we are far behind some of the Eastern European countries, but of course our economic system does not lend itself as easily as theirs to this kind of environmental manipulation.

Equally dramatic changes have taken place in the patterns of outpatient therapy. The recognition by contemporary psychiatry of the fact that psychopathology resides not simply within the individual but in his disturbed system of relationships has led to a considerable broadening of the parameters of psychotherapeutic practice. Although individual one-to-one psychotherapy still constitutes the most frequently used modality, there has been increasing emphasis on trying to deal also with the larger systems of the patient's interpersonal relationships. Thus there has been a growing utilization of conjoint marital treatment, family therapy, and group therapy, as well as efforts to modify other pathogenic aspects of the patient's life system wherever this is indicated and feasible.

Psychotherapy is now recognized as more than just a matter of giving a patient "insight"; it is seen as a learning experience by which the patient acquires new and more adaptive models of behavior, thinking, and feeling. The recognition of this has led to a renewed interest in various theories of learning and to efforts to apply these theories more effectively in altering the patient's maladaptive coping patterns. We have come to understand that therapy is not only a matter of the patient's unconscious preconceptions and transference distortions, but also that the real personalities of both patient and therapist—including such factors as intelligence, empathy, genuineness, value systems, and ability to relate to one another—are of major significance in the treatment process. As a consequence, psychotherapists are becoming more active participants in a dynamic transactional relationship with their patients.

Utilizing these various principles and awarenesses within the framework of insight-oriented and behaviorally oriented therapies, as well as combinations of the two, we have evidence that our psychotherapeutic efforts are becoming more effective and more economical in many areas. Patients with phobic disorders and anxiety states can often be helped within months instead of years, and the therapy of sexual dysfunctions, which once covered years and brought only indifferent results, can frequently be conducted successfully within weeks. Techniques of crisis therapy, brief or less frequent psychotherapeutic interventions, and group therapies have made effective psychiatric assistance economically available to larger numbers of people than ever before. Of course there are also serious personality disorders—analogous to some chronic medical disorders—whose roots extend into the earliest years of childhood; the therapy of these disorders still poses great difficulties and may require many years of effort. On the other hand, if we can catch such disorders in childhood, *in statu nascendi*, treatment of the disturbed family dynamics that foster them can often produce quick and dramatic changes for the better.

However, there is no room for complacency in any area of our field. Much remains to be done, and the effort must be a continuing one. In this regard we are deeply concerned about the low priority and the budgetary restrictions that recent administrations have been placing on mental health research, training, manpower, and services. We consider this approach to be exceedingly shortsighted and one for which our nation is paying dearly in economic terms as well as in human suffering. We shall continue to protest these cuts with all the vigor at our command.

THE CONTEMPORARY SOCIAL SCENE

I turn now to the fourth aspect of my comments. I have placed considerable emphasis on the developments that have been taking place in the areas of neurophysiology, neurochemistry, and psychopharmacology. But I would like to add a word of caution: we must not allow our growing awareness of the biological component in mental illness to lead us to a depreciation of psychodynamic and sociocultural determinants. Causality is hardly ever lineal and almost always multifactorial. The expectation, so often

cultivated in the news media, that some day all mental illness will be curable by drugs is a simplistic fantasy that fails to take into account the multifactorial elements in the genesis of mental illness. Our efforts at the primary prevention of mental disorders (an area, incidentally, that deserves far greater attention and research support than it has been receiving) will always have to be made on a variety of fronts—genetic, biochemical, familial, interpersonal, and sociocultural. We have long been aware of the deleterious effects that poverty; protein deprivation and other nutritional deficiencies; unemployment; racial, religious, and sexual discrimination; and other sources of social and economic stress can have on the mental health of individuals. There is no need to belabor this point to this audience, other than to point out that almost every APA President since Adolf Meyer has emphasized that these problems are a legitimate scientific concern for our Association, and that calling their deleterious effects to the attention of society does not constitute political action but rather is a reasonable exercise of our public health responsibility in the area of mental hygiene.

I would like now to focus on a somewhat different issue. Why do these detrimental conditions continue to exist in a nation so rich in scientific, technological, and natural resources 200 years after it was conceived in liberty and equality? Why is it, as we look around us, that we see so much moral corruption at all levels of our society as well as a pervasiveness of crime and violence that is rendering our urban communities increasingly unsafe and turning our homes into barricaded fortresses? Why has there been such a serious deterioration of shared and affiliative values and of common social purposes that the need to remain uninvolved has become far more compelling to most people than concern for their fellow beings? Society often turns to psychiatry for the answers to these questions, but although we can make pertinent contributions diagnostically, the treatment of these ills is beyond our competence alone. Problems such as these cannot be solved simply by improved child rearing or moral, educational, or psychotherapeutic practices. They are deeply imbedded in the very structure and fabric of our society.

Over 40 years ago Ruth Benedict, the noted cultural anthropologist, made an observation in her study of various cultures that I believe has some relevance to the issues I am raising (5). She observed that there was a very low level of intrasocial aggression and violence in societies in which an individual by the same act served his own advantage and that of the group; she called these "high synergy societies." The social institutions in these cultures were so constituted that what benefited the individual also benefited the group; thus mutual cooperation was encouraged and intrasocial competitiveness tended not to develop. In contrast, in societies structured so that the advantage of one individual was generally at the expense of another, intrasocial competition was fostered and a much higher incidence of intrasocial aggression and violence ensued. Dr. Benedict designated these as "low synergy societies." It is important to note, she pointed out, that the absolute amount of wealth in these societies was not the determining factor in the emotional security they did or did not afford: What counted was whether the economic system tended to concentrate the society's riches within a small group or to disperse them widely.

Although ours is an infinitely more complex culture than those Dr. Benedict studied, I believe her findings may well have applicability for us also. Ours is an essentially low-synergy society whose institutions for the most part require us to compete against one another to acquire its material and social rewards. Our basic personalities are shaped in the matrix of those needs, and adaptive success is usually related to the capacity to compete effectively, with what we have come to call "healthy aggression." But as our society has evolved, even though our per capita wealth continues to rise there has been a progressive maldistribution of this wealth, with a widening gap between the extremely affluent and the rest of the population. The rising rates of crime, violence, and moral corruption that we see around us may well be an offshoot, at least in part, of this maldistribution and the unconscious as well as conscious aggression and counter-aggression it stimulates among the "haves" as well as the "have-nots." This is not to discount in any way the importance of other factors such as personal psychopathology, TV violence, media coverage, and many others, but only to point at what may well be a fairly basic determinant.

It would be naïve to underestimate the enormous complexity of the issues involved or the difficulties inherent in trying to solve these problems. Arnold Rogow commented in his recent book *The Dying of the Light: A Searching Look at America Today* (6) that what is needed, among other things, is a massive redistribution of our wealth to end both poverty and indulgence, as well as an allocation of our capital and productive capacities to public rather than private demands. In my own thinking about this problem I have elsewhere suggested that a possible high-synergy direction in which our society might move would be to evolve broad patterns of cooperative social organization while maintaining the values of the free enterprise system in areas that do not involve the exploitation of natural resources or control over basic means of production (7). Needless to say, in striving for higher social synergy we must not under any circumstances sacrifice the precious heritage of human freedom that was given us 200 years ago.

It is earnestly to be hoped that in the years ahead leaders will emerge on our national scene capable of stimulating the kind of shared values that will restore a sense of unity to our nation and put us back on the high road of social progress that the founders of this nation dreamed of 200 years ago. Our country desperately needs restructuring of its priorities and revitalization of its purposes—not toward more horrendous weap-

ons of destruction but toward the betterment of human life.

As I bring these remarks to a close I cannot help reflecting briefly on how indebted I feel to the profession of psychiatry that I embraced more than 40 years ago. Although it has been the target of increasing criticism, I believe this is a reflection of its growing, rather than its declining, influence. The nature of our work tends to place us in loco parentis, and as parent surrogates we arouse unconscious expectations in others, who endow us with qualities of omniscience and omnipotence that we cannot possibly fulfill. Over and above this, like any other group we have our share of incompetent and poorly principled individuals. But, taken as a whole, I know of no other profession that is basically more dedicated to the enhancement of human dignity and reason, and the furtherance of human welfare, than is ours. Nor do I know of any endeavor that is more rewarding—not in the sense of material gain but in terms of personal enrichment—that not only gives us the precious privilege of helping other human beings in distress but also of learning from each of them so that our emotional growth and our vistas of understanding and compassion are progressively enhanced with each passing year, and in the end we can truly say with the ancient poet that nothing human is alien to us.

These past two years in which I have had the privilege of serving as President-Elect and as President have been particularly meaningful and gratifying to me. In my travels across the country I have been warmed by your hospitality and enriched by exchanging views with many of you on a wide variety of subjects. I have come to appreciate more deeply than ever the diversity of the threads that make up the complex fabric of our profession and to recognize that truth is a coat of many colors. I have viewed my task as that of integrating this diversity, to the best of my ability, in the common interest of all. If I have failed in any respect it has surely not been for want of trying! I thank you for the honor you have accorded me.

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Response to the Presidential Address

BY ROBERT W. GIBSON, M.D.

ON THIS OCCASION of the 200th anniversary of our nation, it is particularly appropriate that Dr. Marmor in his Presidential Address has provided us with an overview of our Association's internal and external relationships, the theory and practice of psychiatry, and the relationship of psychiatry to contemporary America. This is fitting not just because it is the 200th anniversary of our nation, but because in all these areas we face major challenges and simultaneously have unparalleled opportunities.

It is characteristic of Dr. Marmor that he has said very little about his own role in the events of the past year. He has been an active President, an articulate spokesman, an able executive. It has been a privilege to serve with him and to experience firsthand the sensitivity of his guidance and leadership.

An outstanding example of this occurred in his tireless efforts to respond to the recommendations of the Key Conference. Dr. Marmor spearheaded the effort to develop a new organizational model and to create a new Constitution for our Association to implement this model. The deliberations included diverse points of view. They were frequently emotionally charged, and the obstacles often appeared insurmountable.

At times we seemed on the horns of a dilemma. Failure to act could be interpreted as resistance by the Board of Trustees to shift power to the Assembly of District Branches. To move ahead without thorough analysis of the complex checks and balances, to neglect the financial implications, or to ignore the legal consequences would be irresponsible. Dr. Marmor focused on these issues. He persistently reminded us of the need to increase the involvement of our members and to democratize the decision-making process. By so doing he made it possible for us to reach consensus and to submit a revision of the Constitution and By-Laws to the Secretary just days before the deadline. For this we are all indebted to him. A final resolution has not as yet been achieved, however.

At the meeting of the Board of Trustees on May 9 a decision was made to withdraw the version of the Constitution and By-Laws that had been submitted by the Board. This decision was reached after very careful deliberation and reflects the judgment of the Board that the document that had been prepared had serious faults. As a consequence the Board of Trustees is not formally submitting a new Constitution and By-Laws to the membership at the business meeting on May 11. Four previously prepared petition proposals are to come before the membership at the business meeting. In submitting these several proposals it was the intent of the petitioners to offer a range of options that could be subjected to further study.

A joint committee of the Board of Trustees and the Assembly will continue to work on a new Constitution and By-Laws, will carry out a critical review of all of the proposals that have been prepared to date, and will strive to prepare an improved version of the Constitution and By-Laws that will fulfill the recommendations of the Key Conference. I recognize the difficulty in grasping the full implications of these actions because of the complexity of the issues. I will do all in my power to clarify and simplify this material so that it may be presented to the membership in an understandable form.

There can be no doubt of the dedication and sincerity of the effort that has already been made. But in creating a new instrument to govern our Association for years to come we must be sure that it will be effective and will meet the many complex demands. In the interim as your incoming President and in collaboration with the Speaker of the Assembly of District Branches, I will strive to achieve the intent of the Key Conference recommendations: to shift authority for formulation of policy toward the Assembly and to seek increased involvement and participation of our total membership. This could be accomplished, in the period before a new Constitution is developed, through delegation by the Board to the Assembly of its authority over functions of the Association in such areas as education, mental health services, national affairs, emerging issues, and membership matters.

Dr. Marmor's description of the scope of the activities of our Association highlights not only the enormous expansion but the increased complexity of the many organizational components and staff. I suppose there was a time when it was enough for a professional organization to identify problems, to seek solutions, and to develop reasonable plans that would further the interests of both the patient and the profession. Now we are confronted by a multitude of demanding tasks. It takes constant effort just to identify the problems. We must be constantly vigilant to keep informed of developments in psychiatry, in medicine generally, in the overall health field, and in many

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related areas. We must analyze this information so that we can formulate effective responses. We must anticipate problems so that we can take the initiative. We must maintain communication with the members to get the benefit of their wisdom and explain our actions, and we must learn the skills and mobilize the resources needed to get our recommendations accepted.

ADVOCATE FOR THE MENTALLY ILL

The APA is a scientific organization; about that I have no question or reservation. Yet the myriad activities described go far beyond the scope of medical practice and scientific inquiry. Simply collecting scientific data is not an end in itself. We already know far more about psychiatric treatment than is being effectively utilized. We must use that knowledge to make a difference—to benefit our patients. We have a responsibility to serve as advocate for the mentally ill. Dr. Marmor has given us a glimpse of the many fronts on which we move: government relations, judicial action, health care financing, public affairs, interprofessional liaison, advocacy for the underserved, to name just a few.

Dr. Marmor accurately portrayed the transformation of the mental hospital from snakepit and warehouse to therapeutic community. And he has emphasized the emergence of a continuum of treatment settings with varying levels of care from inpatient to halfway house, to day hospital, to emergency and crisis clinic, to outpatient care. All of these can be provided under public and private auspices, by the private practicing psychiatrist, and in organized settings.

However, what Dr. Marmor describes is what can be, what should be, the optimal. It is what patients must receive if this country is to make good on the commitment that adequate health care is a right and not just a privilege. It is what patients could receive if equal coverage were provided for the mentally ill under all systems of financing. Regrettably, in too many instances health resources that would permit the level of treatment that Dr. Marmor has described are not being made available. This is particularly true for the chronically ill, whose needs will be explored during the coming year at an APA conference.

The growing demand for accountability from all facets of our society has been especially stressed. Traditionally, professions have had society's sanction to govern the activities of their organization and their members. Indeed, this privilege is the hallmark of a true profession. In the past decade we have experienced an erosion of the public trust in virtually all of the institutions of our society. Comments such as "Health care is too important to be left in the hands of doctors" have become all too common.

As Dr. Marmor has pointed out, health is influenced by many social forces; psychiatry interacts with a multitude of systems. Such increased exposure inevitably opens us to new challenges and to demands to justify our practices. Endless harassment by regulatory agencies is the order of the day. We do not want our profession to be stifled by bureaucratic intrusions. This would be counterproductive to the best interests of patients. Yet we seem to be drifting in that direction.

All this generates anger and resentment, but simply protesting will not alter the course of events. In my judgment we must take positive and constructive action. I agree completely with Dr. Marmor that the public has the right to expect accountability not only from us but from all professionals and legislators, and I agree that in responding to these demands we will be involved in a broad range of activities, including peer review, preservation of confidentiality, certification and recertification, continuing education, and maintenance of ethical standards.

A PROFESSION WORTHY OF THE PUBLIC TRUST

As physicians we want to improve the quality of health care and we want such care to be available and accessible to all. To do so we must strengthen and refine our internal system of review to keep pace with advances in psychiatric practice and the increasing complexity of the delivery system. We must press ahead to define more clearly our own standards and criteria for what constitutes quality psychiatric care. Beyond that we must develop mechanisms to utilize our findings to improve all elements of our professional activity. We must demonstrate that our own voluntary system of peer review and quality assurance is more effective than the external requirements imposed by government and third-party payers. In short, we must reaffirm our stature as a profession worthy of the public trust.

Judd Marmor, M.D.
One Hundred and Fourth President, 1975–1976

BY MELVIN SABSHIN, M.D.

DURING THIS PAST YEAR the American Psychiatric Association required a President with an abundance of wisdom, graciousness, tact, good humor, energy, incisive intelligence, and tolerance, tempered by a capacity for the appropriate employment of forcefulness and limit setting. That our 104th President, Judd Marmor, possesses these characteristics among other qualities of leadership was exceedingly important when one considers the complexity of the decisions required in 1975–76.

It has been Dr. Marmor's singular burden and task to moderate the debate that has attended the process of determining whether we will adopt a new constitutional structure for the Association, based on the Key Conference consensus that the governing powers of the Association should be shared by the Assembly and the Board of Trustees. Our final decision, of course, remains to be determined by the voting membership. However, thanks in large part to Dr. Marmor, we may be sure that the basic questions related to the proposed structural changes have been explored, and our final vote can therefore be more informed and intelligent. Throughout, the debate over the question has engendered much affect, strong positions pro and con, a multitude of shadings of opinion, and withal an ever-present and deep concern about the future direction of our organization.

Dr. Marmor's mettle as presiding officer in many of the discussions was tested to the full. Whatever the ultimate decision by the membership, the process was facilitated by our President's basic conviction and faith that by fostering exchange and dialogue, by listening long enough to each other, by encouraging the expression of all possible points of view, it is possible to elicit a commonality of interests and to achieve an orderly process of change for the better. Clearly, it is leaders of Dr. Marmor's genre who provide the glue that holds our Association of 22,000 psychiatrists together in common dedication to advancing the objectives of APA.

To present a succinct but personal commentary about our Presidents in the relatively few paragraphs that are allotted every year in these pages is no small challenge. Obviously it is possible to select only a few highlights, and that is what will be attempted here.

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The author consulted a number of sources in the preparation of this article; he would like particularly to acknowledge the assistance of Alex Rogawski, M.D. (1, 2).

EARLY YEARS

We begin by noting that Dr. Marmor was born in London, England, in 1910, the middle of three sons in a family of meager means but considerable intellectual accomplishment and a politically liberal orientation. His father was a writer, historian, and literary critic. When Judd was about a year old the family moved to Chicago, where his father became the Chicago editor of the Jewish *Daily Forward*. Judd spent his grammar school years in that bustling metropolis. In these early years his older brother was a promising student of literature. He had just graduated from the University of Chicago at the age of 20 when he died. This tragedy led to a depression in Judd's mother, to whom Judd was very deeply attached, and she began a pattern of relying heavily upon him. One might venture to suggest that the resolution of this poignant family crisis played a significant role in Judd's subsequent choice of career as well as his overall character structure.

Judd's education continued in New York City when his family moved to the nation's largest city and cultural center. Always a brilliant student, he graduated from high school at age 16 and did so well that he received two scholarships which, together with summer jobs, enabled him to attend Columbia University. Significantly, he majored in English there and read widely in the arts and humanities, with a special interest in Greek drama. His decision to become a physician was fortunate for us, given the diverse possibilities and pathways open to him. As an honor student he was admitted to the Columbia University College of Physicians and Surgeons at the end of his junior year. He received his A.B. degree (and a Phi Beta Kappa key) in 1930 after completing his first medical school year, and his M.D. in 1933. In his second year of medical school he visited a mental hospital and became "tremendously involved with the patients," as he puts it. That involvement fused with his interest in the humanities and science and his personal experiences into a decision to enter psychiatry. For Judd to opt for psychiatry in the climate of the early 1930s required the kind of passionate conviction and courage that so characterize him.

Promptly after graduation he was fortunate enough

to secure an internship at St. Elizabeths Hospital in Washington, D.C., where Dr. William Alanson White was Superintendent and Dr. Nolan D.C. Lewis served as Clinical Director. Dr. White was one of the leading early advocates and popularizers of psychoanalysis in the United States, and Dr. Lewis shared that perspective. Judd was already psychodynamically oriented and had been stimulated as well as fascinated by his extensive and intensive reading of Freud's collected works.

In 1935 he returned to New York City and took a neurological residency at Montefiore Hospital, where he was part of a milieu that attracted a number of bright young psychiatrists. Subsequently he applied for psychoanalytic training at the New York Psychoanalytic Institute. His application was readily accepted. In order to finance his psychoanalytic training he took a job at Brooklyn State Hospital at a salary of $2,000 a year, and at the same time undertook a personal analysis with Abraham Kardiner, also at a cost of $2,000 a year, leaving him nothing for "beer and pretzels." His days were full. He worked from 7:30 a.m. until 4:30 p.m. at the hospital. Then he dashed to the subway to go to his psychoanalytic hour. After that he grabbed a bite to eat, if he could manage it, and then saw two or three patients in the evening. He was lucky to get back to the hospital by midnight. Pragmatism finally prevailed and, at the age of 28, he gave up the job at Brooklyn State and took on more private patients. This relieved matters considerably.

The faculty at the New York Psychoanalytic Institute in the late thirties was a brilliant and exciting group featuring such luminaries as Brill, Spitz, Kubie, Lewin, Zilboorg, Stern, Horney, Thompson, and many others. These pioneers played a key role in the development of psychoanalysis in the United States; this included, of course, debate about theory, policies, and personalities. The departure of Karen Horney from the Institute aroused a great deal of passion and concern. Judd shared this concern and was critical of what he perceived to be a strong tendency toward orthodoxy and authoritarianism among the leadership of the New York Psychoanalytic Institute. He resigned from the Institute and joined the Horney group in the American Institute of Psychoanalysis only to find, to his disappointment, that some of the same problems of factionalism existed in the new setting. In part out of discouragement, he joined the faculty of the Department of Psychiatry at New York Medical College, where a new organizational structure for a psychoanalytic institute was being attempted. Later those involved in this endeavor joined with a number of other constituencies in organizing the American Academy of Psychoanalysis.

Happily, there was more to this period in Judd's life than career decisions and changing affiliations. In 1938, Judd married Katherine Stern—a joyous and felicitous event. In 1941 their son Michael was born. Now, 35 years later, Michael is Assistant Professor of Ophthalmology at Stanford, having already demonstrated a creativity and scholarship rivaling that of his parents. He and his wife, also a physician, are raising two children of their own.

We may safely assume that being the spouse of a dynamo like Judd is never easy. But Katherine has always made it seem comfortable, not only by her devotion to him but by also creating her own world of interests in contemporary art and the theater and sharing them with Judd. In addition, Katherine has complemented Judd's dedication to the mental health cause by receiving a master's degree in psychology and by assuming leadership in the group therapy program at the Los Angeles Suicide Prevention Center. Those of us fortunate enough to know Katherine Marmor have also learned of her warmth, her keen intelligence, and her sense of justice and dignity.

THE WAR YEARS

In World War II Judd joined the U.S. Public Health Service and was assigned to a Navy base in Florida near the base where Grinker, Spiegel, Donahue, and Weinberg were attached. Judd became acquainted with the Don Cesar Army Air Force Convalescent Hospital group in St. Petersburg, all of whom have became significant leaders in the American Psychiatric Association.

Happily, during the war he had an opportunity to reflect on his career thus far and to ponder what course he should take after the war. He made two major decisions. First, he would apply for readmittance to the New York Psychoanalytic Institute and hopefully complete his work there. He believed that he had probably made a mistake in leaving in the first place and that more could be accomplished by working from within to bring about constructive change. Second, after this was accomplished, he would move to California, where he would combine private practice with teaching, research, and community work. He achieved both of these goals. The New York Institute welcomed him back warmly and told him he would not have to undertake further personal analysis but would only need to have some additional supervision of his analytic work.

THE MOVE TO LOS ANGELES

Judd moved to Los Angeles in 1947 and completed his psychoanalytic training at the Los Angeles Psychoanalytic Institute in 1948, soon becoming a member of the American Psychoanalytic Association. Then, to his distress, he found himself once again in a "split" situation in the Los Angeles Psychoanalytic Institute in the early fifties. Judd again wanted no part of this factionalism and attempted to retain his membership in both the original Institute and the newly formed Southern California Psychoanalytic Institute. Ultimately he became a training analyst in the Southern California Psychoanalytic Institute and has remained a member

of this group to the present time.

Without ever intending to isolate himself in this single pursuit, he established a flourishing private practice in Los Angeles. His empathy with private practitioners is deep and is still present, as was reflected in the recent Joint Information Service volume on private practice (3).

Dr. Marmor became a Clinical Professor of Psychiatry at the University of California, Los Angeles, a Visiting Professor at the UCLA School of Social Welfare, and a consultant to the Los Angeles County Bureau of Adoptions (reflecting his growing interest in social psychiatry). He was also Senior Attending Psychiatrist at the Los Angeles County General Hospital and Mount Sinai Hospital and Senior Consultant at the Wadsworth Veterans Hospital. Later he was to hold other major appointments in the area, notably those of Director of the Division of Psychiatry at the Cedars-Sinai Medical Center and in 1972 Franz Alexander Professor of Psychiatry at the University of Southern California.

ROOTS OF HIS VALUE SYSTEM

Judd's deep distaste for anti-intellectualism, prejudice, and dogmatism in all their forms had its roots in his early upbringing in an intellectual family setting. As a youngster he was the only one in his class who supported Eugene Debs when he was running for President. He was much impressed by the essays of the agnostic Robert Ingersoll and the novels of Jack London. Upton Sinclair also greatly influenced him, especially Sinclair's *Cry for Justice*, which sparked Judd's natural impulse to fight for social justice. Like many others he was deeply taken with the concepts of dialectical materialism, which perhaps played a role in shaping his view of man as the product of many forces of action, reaction, and synthesis—a fitting intellectual precursor to dynamic psychiatry. Again, like a number of his contemporaries he became disillusioned with the application of Marxist dialectical materialism in the Soviet Union. Throughout his life he has been fascinated by theories but ever careful to escape from the ivory tower of an isolated theoretical construct. He has always been open to new observations and divergent opinions and has been willing to stand up to the displeasure of powerful groups for deviating from the rigidities of their beliefs.

PREDOMINANT THEMES

In the same year (1974) that we elected Judd our President, his major work, *Psychiatry in Transition* (4), was published. It contains what he considers his chief contributions to the literature over the past 40 years. As he himself explains, certain predominant themes pervade all of his contributions.

One is that if a theory fails to rest on sound scientific thought and yet proves itself pragmatically effective, then the theory, not the practice, must be altered. Psychiatry has always encompassed a myriad of approaches, virtually all of which work at times and fail at times. If we are ever to find a way out of the scientific maze, it will only be by clinging to the compass of scientific thought and method.

A related theme is resisting the siren call of simplistic or "linear" explanations of complex problems. One must rather turn to a general field or systems theory wherein the human being is viewed as an open system in which inner self-activating mechanisms and feedback processes are in continuous exchange of energy and information with the environment. Judd's recent papers on psychotherapy clearly reflect this perspective.

Still another theme is the search for common denominators underlying divergent views that characterize our field—a theme which applies aptly to his conduct as our President this past year. As Judd puts it, the biologically oriented psychiatrist seeks to explain human behavior primarily with biological determinants, the psychoanalyst in pure culture emphasizes intrapsychic factors, and the social psychiatrist views sociocultural causality as most significant. To Judd, any comprehensive explanation of human behavior must encompass all three vectors, not in sum, but in dynamic interaction with one another (4, p. xii). Beyond stating these principles abstractly, Judd lives and breathes these ideas and they affect his every paper, speech, and act of psychiatric leadership.

Finally, throughout all that he has done and thought is his overriding belief that the human condition can be bettered—that war and poverty must be eliminated, that social justice is achievable, and that human values can indeed change for the better. Judd is not a starry-eyed idealist and he recognizes the difficulties in achieving these ends, but the effort must be made in a rational and occasionally pragmatic fashion.

In addition to his compassion and his genuine warmth, Judd is extraordinarily eloquent. Not only are his writings edifying, but because of his clarity and economy of diction they are easy to digest. His artfulness in presenting complexities in crystal-clear and logically ordered sentences renders the most complex matters relatively simple to grasp. Moreover, as Eisenberg says in his introduction to Judd's book: "One of the most remarkable qualities of Judd Marmor's writing is the extent to which it has survived the usages of time. . . . The great majority [of chapters in his book] have focused on problems no less central to contemporary psychiatry than they were when the papers first appeared" (4, p. v). Eisenberg goes on to say that Judd is on the side of the angels and salutes him as one of the "happy few willing to do battle for the liberation of man's spirit." He continues,

> In the end, no reader can fail to sense the compassion, the perceptiveness and the heterodoxy of these collected papers. Their author has a point of view, but people come before theories. He is acutely aware of the struggles, the

> contradictions and the uniqueness of each of the troubled persons who seek his help. In responding to their needs, he refuses to be bound by what ought to be so and insists upon recognizing what *is* so. To his work, he brings a richness of experiences, a treasury of scholarship, a life committed to trying to be of help and humbled by an awareness of the limitations to even the best informed effort to meet that challenge. (4, p. vii)

An example of the survival value of his works is that Judd noted in 1955 that it was impossible to set down rigid rules about whether psychotherapy should be directive, nondirective, silent, talkative, reserved, or friendly, because the method would have to relate to the patient's needs. Further, it was absurd to think that the doctor's value judgments could be entirely eliminated from his relations to the patient. What was important was that the therapist, whatever method he used, enhanced the patient's growth and self-realization (4, p. 294).

In 1953 he pointed out that the constant exercise of authority by the psychotherapist carries with it the occupational hazard of tending to create unrealistic feelings of grandiosity and superiority in the therapist, and that this tendency fostered strong "in-group" feelings (4, pp. 280–282). This led to the development of a private language in the in-group and rendered communication among different groups more difficult. While personal analysis and supervision were helpful in alleviating these tendencies, they were not enough, and the therapist had to be constantly on guard lest he overestimate his own status and ideas. Only by cultivating "democratic" interpersonal relationships with a variety of people and groups could he guard effectively against "The God Complex" (Ernest Jones's phrase).

In 1955 Judd postulated his firm conviction that "ultimately we shall be able to extrapolate out of all the diverse and multitudinous approaches which are included under the broad concept of psychotherapy, those common denominators which are the specific therapeutic factors . . . [and] when we do, we shall find that the most significant factors lie not in the area of verbal interpretations made by our patients but, more importantly, in the area of interpersonal relationship between the therapist and the patient" (4, p. 293). If we can but use our present structures on which to build a truly scientific psychotherapy, he added, we may achieve the ideal of the psychotherapist which Nathaniel Hawthorne expressed so brilliantly in these words from the *Scarlet Letter*:

> If the [physician] possess native sagacity, and a nameless something more—let us call it intuition; if he show no intrusive egotism, nor disagreeably prominent characteristics of his own; if he have the power . . . to bring his mind into such affinity with his patient's, that this last shall unawares have spoken what he imagines himself only to have thought; if such revelations be received without tumult, and acknowledged not so often by uttered sympathy as by silence, an inarticulate breath, and here and there a word, to indicate that all is understood; if to these qualifications as a confidant be joined the advantages afforded by his recognized character as a physician—then at some inevitable moment, will the soul of the sufferer be dissolved, and flow forth in a dark, but transparent stream, bringing all its mysteries into the daylight. (4, pp. 294–295)

All of this provides only a suggestion of the flavor of Judd's thinking. Altogether he has contributed 175 scientific papers and four books to our literature.

AFFILIATIONS AND HONORS

The combination of his scholarship and literary skills has led him to the editorial boards of such journals as the *American Journal of Psychoanalysis, Archives of Sexual Behavior, Contemporary Psychiatry, Contemporary Psychoanalysis,* and the *American Journal of Community Psychology*.

His leadership abilities have also been reflected in his service on the boards of directors of the American Orthopsychiatric Association, the Behavioral Science Research Foundation, the Group for the Advancement of Psychiatry (which elected him president from 1973 to 1975), the Sex Information and Education Council of the U.S., the Human Action Research Foundation, and the Neumeyer Foundation, as well as several others. He served as APA Vice-President before becoming President-Elect.

Many of Judd's other roles, affiliations, and activities have been omitted, but it should be noted that he holds an honorary Doctor of Humane Letters degree from the Hebrew Union College in Los Angeles, was made an Honorary Fellow of the Australian and New Zealand College of Psychiatrists in 1975, and was given the Silver Medal Award by the Columbia University College of Physicians and Surgeons in 1967 for his distinguished contributions to the field of psychiatry.

In sum, Judd Marmor is a humanistic psychiatrist and scholar whose hopes and aspirations reflect many of the most positive values and ideals of a democratic society. Furthermore, he is an articulate and lucid spokesman in an age of increasing complexity. He will do still more, and we must be grateful that such a man has symbolized the image of our profession during his tenure as our President.

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The Psychiatrist and the Pain Clinic

BY I. PILOWSKY, M.D., D.P.M.

The author discusses the difficulties inherent in the role of the psychiatrist in a pain clinic as well as some of the recurring problems that he has seen in this setting. He states that the psychiatrist brings to the understanding of pain a multidimensional approach, which is hard for nonpsychiatrist clinicians to accept, and valuable psychophysical methods for evaluating and quantifying pain. He discusses aspects of the interplay between intrapsychic and interpersonal factors in the pain experience, particularly the relationship between pain and guilt, and illustrates these aspects with case reports.

THE ROLE OF THE PSYCHIATRIST in a pain clinic may be variously defined, but in essence it involves the elucidation of the psychological and interpersonal factors contributing to the nature of the patient's pain experience and the planning of appropriate management in light of these factors.

Fulfilling this role is inevitably difficult; it seems profitable to consider briefly why this might be so and how the difficulty might be met. Having done so, I will describe a number of recurring clinical constellations and themes that have been seen in the clinic of which I am a member, in the hope that the theoretical and practical issues they raise will be of general interest.

DIFFICULTIES IN THE PSYCHIATRIST'S ROLE

It must be the experience of every psychiatrist who has accepted membership in a pain clinic that his first task is to persuade other members that he does not believe every pain to be "psychogenic." Achieving this is peculiarly difficult; the sources of the difficulty bear consideration.

In the first instance it must be acknowledged that in certain pain clinics the number of patients in whom psychosocial factors are the chief determinants of their pain experience is extremely high. Clinic members such as anesthetists, neurologists, and neurosurgeons are inevitably frustrated by such patients because they feel their cases offer little scope for expertise. Under these circumstances the nonpsychiatrist physicians are limited to the use of diagnostic procedures that exclude various pathologies but contribute little to therapy.

This is particularly true when most of the patients referred to the clinic have been thoroughly investigated for the presence of significant somatic pathologies before referral. On the other hand, it is rare to encounter a patient in whom the psychosocial dimension has been explored beyond the superficial level. Thus in virtually every instance the psychiatrist is able to make a major contribution to the understanding of the patient's problems and consequent management; often, in fact, the psychiatrist seems to provide all the answers.

It is important to realize that an understanding or, perhaps more accurately, a conceptualization of the patient's personality and current life situation is not to be equated with a knowledge of the etiology of the patient's pain—except in terms of the rather simplistic causal models used by many clinicians. Although most clinicians will acknowledge the fact that not all preconditions are either necessary or sufficient for the development of a particular disease process, they will in practice frequently speak of discovering "an organic cause for the pain." Similarly, one may find one's nonpsychiatrist colleagues only too eager to accept the idea that psychological factors explain the patient's pain entirely.

Clearly, then, the clinician has a deep need to find "the cause" or, more importantly, "the remediable cause," and rightly so. Unfortunately, however, unitary concepts have an exceedingly short half-life in the psychosomatic field, not that their inappropriateness prevents clinicians from applying whole series of treatments to patients with chronic pain in the hope that the jackpot will somehow be hit. Quite possibly it sometimes is, but the nature of the referral process to a pain clinic ensures that the psychiatrist on the panel will rarely if ever encounter such an outcome.

The factors contributing to the search for "the cause" are multitudinous, but of particular importance seems the tendency toward compartmentalization of medical training at both the undergraduate and postgraduate levels. For quite sound pedagogic reasons each teacher tries to sell not only his own wares but also the most clearly defined examples of them. In the time available it would be foolish to do otherwise, but the price must eventually be paid, because the vast majority of patients (particularly in the community setting) do not present problems that can be neatly pigeonholed.

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The multidimensional approach is therefore not one that comes naturally to the clinician. His resistance to it may help explain his negative attitude toward the psychiatrist. It is part of the psychiatrist's task in the pain clinic to convey what the multidimensional approach entails and how it may be used. Simply stated, it is predicated on the assumption that the pain experience is shaped by a constellation of variables, which the clinician is required to identify and then rank in terms of the "size" of their etiological role and, perhaps more importantly, the degree to which they are amenable to therapy. It is also important to emphasize that various treatment programs can be initiated simultaneously. For example, the need to carry out further radiological investigations does not preclude the use of psychological and social treatment modalities.

In this context one should perhaps mention the use of admission to the psychiatric ward of a general hospital as a therapeutic and diagnostic tool. For cases in which etiologies are complex and the assessment of disability difficult, the psychiatric ward is particularly well placed to make a contribution to the assessment process. This is so because of the opportunities it provides for normal motor functioning: patients are able to dress, move about, and participate in a wide spectrum of activities against a background in which the impairment caused by the pain can be evaluated over a more extensive time period than is otherwise possible.

EVALUATING AND QUANTIFYING PAIN

The area of evaluating and quantifying pain is one in which the psychiatrist who has a background in psychological research, especially in the use of psychophysical methods, can be particularly helpful to a pain clinic.

In our pain clinic we have found visual analogue scales extremely useful as an adjunct to purely clinical methods of pain assessment. The scale we use consists of a 10-cm line, at the left-hand end of which are the words "I have no pain at all" and at the right "My pain is as bad as it could possibly be." The patient is asked to indicate the severity of his pain by making a mark on the line. The pain score is measured in millimeters from the left-hand end of the line. The advantages of this method reside in the fact that it can be used at frequent intervals, is simple to administer, and is complete. In this way a detailed, continuous picture of an individual's pain experience can be obtained.

Information of this sort can be of considerable importance in helping the patient and staff gain some perspective on the pain suffered by the patient. For example, it has allowed us to monitor pain throughout a nerve block and to observe whether the pain curve coincides with the curve expected, given the known pharmacokinetics of the anesthetic agent used. It is of interest that in some patients the pain disappears almost completely when the needle penetrates the skin and then proceeds to build up after the anesthetic agent is inserted. In others the curve is exactly as expected. In neither case, however, does the course of pain alleviation predict ultimate outcome.

In some cases the "pain line" can be used to monitor pain at hourly or less frequent intervals for days. With this approach it is not unusual to find that pain is not nearly so continuous or severe as the referring doctor's concern has suggested it might be. This type of discrepancy is extremely interesting and a not infrequent finding. In fact, the psychiatrist may discover that he is the first clinician in a long while to take a detailed pain history and to establish precisely the extent to which the pain interferes with the patient's usual activities.

When such a discrepancy is found it is often the case that some person other than the patient may be even more concerned about the pain than the patient himself. One patient who illustrated this situation was a 48-year-old factory worker who had injured his back in a fall. Although he was not completely well when seen, he showed considerable adaptation to his situation. His wife, however, was extremely concerned because a number of the men in her family had died after falls in the coal mines where they had worked. She was convinced that the same would happen to her husband. She was depressed and anxious about his condition and had persuaded him to seek help.

At other times the spouse may be important in a negative rather than a positive sense, in that the patient's pain may worsen when support is withdrawn because some stress has caused the spouse to seek rather than give support. A typical situation is one in which the spouse has experienced a loss, such as a bereavement, and has become depressed. The patient then experiences a worsening in a pain that may have been present for many years.

One may also find that the spouse also suffers pain. In some families it is clear that members compete with each other for the sick role in a manner that is faintly echoed in many well-adapted families from time to time.

Such cases underscore the particular importance of establishing whether the pain has altered in its nature or severity. Patients will often initially describe the pain as having been present for many years without drawing attention to any change in its character that may provide a clue to the etiological factors currently operating. If such a change in the clinical course is not appreciated, it may be concluded that the prognosis for improvement is extremely poor when in fact the patient can be helped to return to a reasonable level of functioning.

I have referred to the fact that a change in the patient's pain experience may be due to a change in the attitude of a spouse; it goes without saying that a change in the health of any member of the family may have a similar impact. I would also like to draw attention to a frequently overlooked "significant other" in whom a change may lead to an alteration in a chronic pain situation. I am referring, of course, to the

patient's physician. This is especially striking in elderly patients who have been cared for by the same physician for many years.

In one woman in her 70s who had experienced pain for at least 10 years the change came when she became aware that her aged family physician had suffered a coronary occlusion. She described extreme preoccupation with the possibility of his dying. Needless to say, careful inquiry revealed that the patient, a widow, had developed a powerful positive transference for the physician over the years, with the sort of sexual overtones most clinicians hesitate to perceive in the elderly. In this case it was important to help her discuss the realities of the situation and to deal with the ambivalent feelings that the threatened loss had aroused in her.

I am aware that in describing the role of the significant other I have focused on current interpersonal factors in rather general terms. A somewhat more detailed consideration of the interplay between intrapsychic and interpersonal factors in relation to their effect on the pain experience is obviously necessary. I propose to discuss a particular facet of this complex area.

PAIN AND GUILT

A number of authors (1, 2) have drawn attention to the relationship between pain and guilt. Nonpsychiatrists often question the role that guilt plays in the causation of pain and ask by what mechanism the former can lead to the latter. The question is a good one and has been posed with some force by Ziegler and Imboden (3) in their discussion of conversion reactions. In the case of pain syndromes I have found it simpler to consider whether a particular symptom "serves a conversion function" than to speak in terms of "a conversion pain." By "conversion function" I refer to the process whereby a physical symptom permits a patient to avoid conscious awareness of a particular conflict and the unpleasant affects accompanying it.

The interaction of guilt and pain illustrates this point well. Whatever else clinical observation may suggest, there seems to be a distinct tendency for guilt and pain not to coexist. The following brief case report illustrates this phenomenon rather dramatically:

Case 1. Mr. A, a steelworker in his 40s, complained of pain involving his penis and perineum that he had suffered for about 15 years. Despite the pain he worked extremely hard in a rather driven, compulsive manner.

He was admitted to a day hospital for assessment and, surprisingly, improved dramatically within about 10 days to the point where the pain was no longer present. He was discharged and seen in the outpatient clinic about 2 weeks later; at this time he complained of severe depression. He communicated these feelings rather histrionically and related for the first time the fact that he had persuaded his wife to fellate him regularly for many years and was overcome with guilt at having done so. On being reassured by the hospital physicians that his guilt was inappropriate and excessive, he said that his family physician (a woman) had already attempted to convince him of this but that he could not be influenced in any way.

He was admitted to the hospital once again. Over a period of 2 weeks his depression, which showed no obvious biological features of the psychotic type, gradually abated, and the pain returned. He was able to return to work and stated that he was finally convinced that his guilt, which had now subsided, had been excessive.

This patient's clinical course suggests that pain may serve to neutralize guilt and that it may be reasonable to generalize that in most individuals pain and guilt rarely coexist. When one considers that pain is almost universally equated with punishment and the expiation of sins it is not difficult to accept the idea that pain may play an important role in the achievement of psychological equilibrium, particularly in guilt-prone individuals.

The acceptance of a model of this sort does not require the existence of some special neurophysiological pathway that somehow links the experience of guilt with the genesis of pain. For most individuals there is, in the course of a lifetime, ample availability of physical sensations of one sort and another, any of which may serve a conversion function at some time. In fact, the conscious use of physical states to avoid unpleasant situations or feeling states is common.

If an explanation for the presence of a particular symptom at a particular time is required, then the well-demonstrated physiological correlates of emotional states would clearly offer a wide range of subjective sensations capable of fulfilling the conversion function. As far as pain is concerned, it is clear that the muscular tension that accompanies certain states of arousal, especially those associated with anger and anxiety, is particularly likely to generate pain at the somatic level.

Thus at the intrapsychic level it may perhaps be said that a quantum of pain neutralizes a quantum of guilt. What may we say at the interpersonal level?

My experience in a pain clinic suggests that although pain has a powerful communication value, its effect changes with chronicity. If pain neutralizes guilt in the patient, what emotions can the patient communicate under its protective cover? Pain gains for the patient admission to the sick role with all its attendant privileges and obligations, which include the duty to seek and use appropriate help.

The patient whose pain is associated with guilt over feelings of loss, anger, or dependency is able to make demands on and achieve closeness to a host of professionals, but the repeated presentation of pain complaints to clinicians who are unaware of their true significance and function inevitably evokes their anxiety, anger, and guilt. These responses may in their turn lead to covert and overt attacks on the patient. Covert attacks may include painful investigations and operations, and overt ones may involve quite frank castiga-

tion of the patient and the imputation of malingering, lying, or mental illness. A reaction of this sort on the clinician's part must inevitably result in a hostile response from the patient, coupled with fear of total rejection. In these circumstances the reporting of pain allows "retaliation by physical complaint" and the preservation of some self-esteem.

In this situation the pain clinic serves a very important function as a sort of sanctuary for both the patient and his clinician. In the clinic peaceful relations can often be reestablished, provided that the patient's hostility at having been referred is dealt with in the very earliest stages. Unless the inevitable negative transference is verbalized and resolved, its continued presence must militate against any further progress.

I have referred to the possibility that a clinician may not be fully aware of the significance of a patient's pain as a communication, nor indeed of the precise characteristics of the patient's pain experience. In addition, some patients do not communicate all of the circumstances of the onset of the pain. These circumstances may be so crucial to the understanding of the pain that the clinician is quite unable to assess the illness adequately. This is often seen in patients whose pain follows an accident that has become the focus of a claim for financial compensation. As might be expected, a number of patients referred to a pain clinic fall into this category.

In a substantial number of these cases a pattern emerges that casts a most interesting light on the negative reactions these patients so often evoke. The aspect of this pattern that appears central to me is the tendency for both the patient and the doctor to enter a tacit agreement or collusion not to explore with any degree of completeness the precise nature of the accident. A few clinical examples may serve to illustrate this point:

Case 2. Mr. B, a man in his early 40s, had suffered headaches since a mining accident 15 years before. As he first told it, the accident involved his being struck on the head by a hopper used for conveying excavated earth out of the mine shaft. He said he had not lost consciousness and, after a short spell in the hospital, returned to work, having sustained a fractured zygoma and little else.

Detailed questioning revealed a rather different picture. The descending hopper had in fact struck his head against a fixed steel railing and locked it there while gradually crushing it under its enormous weight. He remembered hearing the bones of his face cracking and wondering how much more he could take before his skull burst. Fortunately, a workmate managed to release him and he was moved to safety. It is not surprising that this experience produced a classic traumatic neurosis, with recurring nightmares and headaches occurring usually around the anniversary of the accident.

Case 3. Mr. C had been electrocuted while at work. At first he reported that the whole incident lasted a few seconds and that he remembered virtually nothing. In fact, however, he was able to recall on questioning that he had been physically stretched and extended by the shock and felt at the time that he was experiencing his own dying.

In the absence of this type of information, which patients often suppress because of the unpleasant affects it reactivates, the clinician cannot fully comprehend the impact of the accident on the patient. There seems to be a discrepancy between the injury and its sequelae, and the physician often conveys his skepticism to the patient, who in turn becomes resentful and complains with renewed vigor or refuses to cooperate at all. The unfortunate fact is that when financial compensation is an issue, the doctor-patient relationship tends to be deformed: the doctor tends to judge rather than diagnose and report rather than treat. Under these circumstances the management of pain is virtually impossible; every effort has to be made to resolve the financial compensation issue as soon as possible.

RARE CASES

Having described some of the issues that have been prominent in our clinic, it may be worthwhile to mention some that have been conspicuous by their relative rarity. The first concerns pain as a depressive equivalent. I do not wish to discuss this concept in detail except to say that the presence of pain (or any form of illness behavior) seems to modify the presentation of depression. However, we have encountered very few patients who seemed to be suffering from a depressive illness requiring definitive treatment. We obtained a highly satisfactory result by the administration of a tricyclic antidepressant in only one patient, who showed the typical biological features of depression. One cannot conclude from this that pain syndromes due to depression are rare. It may be that with the widespread use of antidepressants very few of these cases actually reach the pain clinic.

I have also not said a great deal about the use of neurosurgical and other techniques for the treatment of pain in patients with advanced cancer. This is because the numbers referred to the psychiatry service are not great—probably reflecting the sensitivity of our radiotherapy department to the psychological and social problems of their patients as well as their readiness to supply them with adequate quantities of analgesic agents.

COMMENT

Finally, I would like to make a general comment on patients taken for treatment by the department of psychiatry. The therapeutic methods used are, in the main, conventional. Psychotherapy and milieu therapy are important mainstays. Physiotherapy is regularly used and includes relaxation exercises, interferential treatment, and biofeedback, which incidentally helps to reinforce our assertion to the patients that all aspects of their illness must be tackled and allows them to relinquish the defensive use of somatic problems at a pace that is appropriate to their individual needs.

Patients who are receiving large regular doses of analgesics are gradually weaned with their active cooperation; we do not allow a power struggle to develop between patient and staff.

In our patients, prognosis and outcome are assessed not merely in terms of the amount of pain reported but also in terms of function. It seems important to emphasize this point because so often clinicians have difficulty accepting that a patient may have achieved homeostasis because of and not in spite of a certain amount of pain and that the constant presence of some pain and the offering of the pain complaint must be accepted as part of the patient's mode of existing and relating. In the words of Ugo Betti (4),

> Nothing is more dear to them than their own suffering—they are afraid to lose it—they feel it, like a whip cracking over their heads, striking them and yet befriending them; it wounds them but it also reassures them. (p. 57)

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Follow-Up of Depressed Women After Maintenance Treatment

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The authors present follow-up results based on 150 women 1 year after maintenance treatment for depression. Maintenance treatment consisted of 8 months of amitriptyline, psychotherapy, or a combination of the two, administered by random assignment following recovery from an acute depressive episode. Approximately 30% of the patients remained in complete remission, 60% experienced recurrence of symptoms, and 12% remained mildly but chronically symptomatic. The implications of these findings for planning care for the ambulatory depressed patient on both an individual and a public health basis are discussed.

CLINICIANS and public health administrators planning for the care of depressed patients need to know something about the efficacy of treatments and the natural history of depression in order to plan long-term treatment programs. This information is beginning to become available in such longitudinal studies as the Boston-New Haven Collaborative Depression Project, in which a large sample (N=150) of depressed female outpatients were treated with amitriptyline, psychotherapy, or a combination of the two. The overall goal was to evaluate the place of maintenance therapy in the treatment of depression and to follow the patients after treatment ended. We were convinced that drug therapy had established its efficacy for the symptomatic relief of acute depression and that it was necessary to assess maintenance therapy to determine its effectiveness in preventing relapse and minimizing disability.

There were three phases of the study: acute treatment, maintenance treatment, and follow-up. The results of acute and maintenance treatment, reported last year, indicated that a substantial number of the patients who entered the acute treatment phase of the study and received amitriptyline for 4–6 weeks improved significantly within that time (1) and that 8 months of maintenance treatment was feasible, efficacious, and safe (2). Maintenance amitriptyline therapy prevented relapse and symptom return but did not have a differential effect on the patients' social functioning (3). Psychotherapy, on the other hand, did not prevent relapse or symptom return but did improve social functioning in patients who completed the trial without relapsing (4).

In this paper we will report follow-up results 1 year after maintenance treatment and look at the implications for planning treatment on both an individual and a public health basis. In cases when sustained effects of maintenance treatment could not be established, we examined the natural history of outcome, keeping in mind the variable course of depression.

RESEARCH DESIGN

The admission criterion for acute treatment was a Raskin Depression Scale score of 7 or more (5). Patients who entered acute treatment received amitriptyline in an open trial in dose ranges of 100–200 mg. Those who responded after 4–6 weeks of acute treatment (N=150) entered the maintenance phase, which took the form of a 3 × 2 balanced factorial design and was conducted at the Connecticut Mental Health Center (Yale University) and Boston State Hospital (Tufts University).

All patients were seen monthly by the initial treating psychiatrist in brief interviews for assessment and prescribing. Half of the patients were randomly assigned to once or twice weekly individual psychotherapy with psychiatric social workers (high contact). The brief monthly interview with the psychiatrist comprised the only contact for the other half (low contact). All patients continued to receive amitriptyline for a transitional phase of 2 more months. At this point, after 3 months of treatment, patients were further randomized as to drug. Within each contact group, one-third of the patients continued on amitriptyline, one-third were withdrawn and put on placebo (double-blind), and one-third were withdrawn overtly onto no medication. Treatment then continued in these six treatment cells for a further 6 months (9 months total treatment—4 to 6

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weeks in acute treatment and 8 months in maintenance); at the end of this time the controlled treatment ended. All patients were followed 6 months and 1 year after maintenance treatment.

All of the patients in this study were women. Most were in their late 30s, and they were typically from the middle and lower middle social classes (6). According to criteria from *DSM-II* (7), 85% of our patients were diagnosed as having neurotic depressions. The majority of the patients had had only one previous episode of depression. Since only 5% of the patients had had a previous episode of mania, the majority fell within the unipolar group. Therefore, the typical patient was neurotic, depressed, ambulatory, and nonpsychotic and for the most part had had one or no previous episodes of depression.

All patients were still living and were located. Over 90% of the patients at both follow-up periods participated in a face-to-face 2-hour interview, in which a research assistant and a psychiatrist covered the patient's clinical course and treatment experiences over the preceding 6 months. This information was supplemented with a review of the patient's records. The patient's clinical status was assessed by the Raskin Depression Scale (5) and the Clinical Interview for Depression (8), a modification of the Hamilton Rating Scale for Depression. Social functioning was assessed by the Social Adjustment Scale (9).

RESULTS

Clinical Course

There were no completed suicides during the entire study or follow-up. However, 3 patients (2%) attempted suicide during follow-up. These were first attempts for 2 of the 3 patients; all were considered minor, and only 1 led to a brief hospitalization. Fourteen patients (10%) at 6 months and 21 patients (15%) at 1 year had again reached the original symptom criterion for admission for acute treatment (Raskin Depression Scale score of 7 or more) (table 1). However, that 3 patients received a Raskin score of 7 or higher on both occasions is indicative of the fluctuating clinical course of these patients.

In addition to these cross-sectional assessments, a retrospective assessment of the patients' monthly symptom status over the year indicated that minor low-grade symptoms were common. Mild to moderate symptoms returned for 88 patients (59%), 18 patients (12%) remained chronically symptomatic, and only 43 patients (29%) were completely asymptomatic during the year.

Treatment Experiences

Another indication of the patients' clinical course is the amount and type of treatment they received during the 1-year follow-up. Only 45 patients (30%) did not receive any treatment; 37 patients (25%) received treatment for 1–2 months; 30 patients (20%) received treatment for 3–6 months; and 33 patients (22%) received treatment for 7–12 months. Over the entire 1-year follow-up, 7% of the patients never had a month without treatment.

TABLE 1
Clinical Status on the Raskin Three-Area Scale of Depression at 6 Months and 1 Year

Raskin Score (Range 3–15)*	6-Month Follow-Up		1-Year Follow-Up	
	Number	Percent	Number	Percent
3–4 (asymptomatic)	84	59	72	52
5–6 (borderline)	45	31	45	33
7–8 (requiring treatment)	10	7	15	11
9+ (moderate to severe depression)	4	3	6	4

* Higher scores indicate more impairment; 7 or above was the initial criterion for treatment of acute depression.

When we examined the type and intensity of treatment, we found that nearly all treatment had been on an outpatient basis. Only 2 patients had been hospitalized over the year—both briefly—and none had received day hospital care. The intensity of treatment was low, usually one to two visits a month. Psychotropic medications, usually tricyclic antidepressants and minor tranquilizers, were commonly prescribed. Over 50% of the patients were receiving psychotropic medications at the time of each interview.

Sustained Effects of Maintenance Therapy

When we examined sustained effects of amitriptyline versus psychotherapy, no striking differences emerged. We found that patients who had received maintenance amitriptyline took significantly more psychotropic medications (not necessarily tricyclics) during the first 6 months than patients who had received no medication. The patients who had received maintenance psychotherapy also tended to receive more frequent treatment in the first 6-month follow-up. Both of these findings suggested a tendency for patients to initially continue seeking in the follow-up period a treatment that was similar to what they had received in maintenance therapy.

We next examined the clinical status and social adjustment of the patients at the two follow-up periods. We divided patients according to their maintenance treatment and did a three-way analysis of variance with three factors (by maintenance drug and contact and by hospital). The results of these analyses did not show any differential sustained effects of the maintenance treatment. However, there is a problem in interpreting these results since pure treatment groups no longer remained. Treatment was not controlled in the follow-up period, and patients sought a variety of treatments.

It was possible that an interaction between treat-

ments received in the maintenance and follow-up phases might be obscuring the results. For example, patients who received psychotherapy in follow-up but not in maintenance may be less symptomatic than patients who did not receive psychotherapy either time. Similar crossover effects could be postulated for the drug groups. In order to test this possibility we did several two-way analyses of variance, looking at maintenance and follow-up treatment and their interactions, and using the patients' clinical and social adjustment status at follow-up as outcome. The results of these analyses showed no interaction between treatments, but a main effect for treatment received in follow-up indicated that the patients who received the most treatment in follow-up (drugs or psychotherapy) were the most symptomatic at follow-up. A month-by-month analysis of the patients' clinical and treatment status indicated clearly that this association was due to the fact that patients sought and received treatment if they experienced a return of symptoms.

DISCUSSION

Three aspects of these findings merit attention: the absence of a differential effect of the various maintenance therapies once they ended, the variable long-term clinical course of these patients, and the implication of these results for planning care on an individual and a public health basis.

The absence of a sustained effect of the tricyclic antidepressant once regular maintenance treatment ended is consistent with expectations. Antidepressant therapy appears to suppress symptoms while the natural processes of recovery take place. Once treatment ends there may be return of symptoms. Maintenance therapy, therefore, is not prophylactic. It does not appear to have an action on the etiological or pathogenetic determinants of the disorder.

There are many such parallels in medicine, e.g., digitalis for heart disease, aspirin for fever, diuretics for edema, cortisone for inflammation. While none of these drugs, once terminated, is expected to prevent future symptoms of the illness for which they are used, they remain important treatment modalities.

The expectations for psychotherapy are slightly different. In psychotherapy the patient is expected to develop understanding about situations that may have contributed to the depression or developed as a consequence. There are several possibilities for the absence of a sustained effect. Eight months may not have been a sufficient length of time, especially since it took that long for the psychotherapeutic effect to develop. The psychotherapy was of a supportive nature rather than an attempt to reconstruct past experiences, which would have presumably led to more enduring change, and was given by social workers (although experienced and highly trained) rather than by psychiatrists. Patients were initially treated with drugs alone and were clearly drug responders. Further research is needed on the efficacy of different types of psychotherapy in depression, given by psychiatrists and begun earlier in the treatment, to determine if more lasting effects can be achieved.

The rationale for maintenance therapy is based on the fact that many patients are likely to have recurrences after they have recovered. These results show that even after 8 months of maintenance therapy patients' clinical courses were highly variable and the majority experienced intermittent symptoms. The clinical course can best be described in terms of remissions, recurrences, and chronicity.

Remission refers to a sustained absence of symptoms following an acute episode (defined as a discrete period of psychopathology that can be distinguished from prior functioning). Only about 30% of the patients remained in complete remission over the year.

Recurrence is the reemergence of symptoms following a sustained (usually several months) symptom-free interval. The majority of patients (nearly 60%) experienced recurrences. Ten percent of the patients at 6 months and 15% at 1 year were as symptomatic as they had been during the acute period. Moreover, there was little overlap between these two groups at the two time periods. On the basis of the Raskin Depression Scale scores at each follow-up, 32 patients (21%) had had a new, documented episode of depression over the year. The remaining patients reported intermittent mild return of symptoms over the year. These symptoms included pessimism and disturbances of affect, appetite, and sleep, which were easily controlled by medication and brief treatment and rarely required hospitalization.

Chronicity is the presence of continuing symptoms without a sustained symptom-free interval. In addition to the nearly 60% of patients with a recurrent episodic course, there was an important group (12%) who remained chronic over the entire year. The percent of chronically symptomatic patients shows some similarity with other reports. In a 1966 New Haven survey of depressed patients entering a variety of treatment facilities, 10% of the patients remained symptomatic 10 months after the index episode (10). Robins and Guze (11), in a review of 12 studies of depressed patients who were followed for up to 20 years, found that 11%–23% had a chronic course. Murphy and associates (12) did a 5-year follow-up on patients diagnosed as having primary affective disorder and found that 16% were chronically ill during the entire period.

Although the definition of chronicity, the time of observation, and the types of patients vary in these reviews, they suggest that a substantial minority of patients have a chronic course. It is unclear whether this is due to insufficient or incorrect treatment.

Given the variable course of depression and the absence of a sustained effect of treatment, how can these results be translated into the care of individuals? One approach might be to prolong maintenance treatment, but the cost, the potential for side effects with indefinite drug treatment, and the dependency fostered by

indefinite psychotherapy would argue strongly against this notion for all patients. An alternate approach would be to offer care on a continuing basis when needed. In this way early signs of pending relapse could be treated promptly, and regular care would be available to the few patients who need it. Our results show that about 10% of the patients will require regular continuing treatment, perhaps on an intensive basis, 30% will require no treatment for sustained durations, if at all, and the remainder will need episodic care that is not intensive. Further work should be done to identify earlier that subgroup of patients who remain chronic and to determine if longer maintenance therapy or changes in medication improve their clinical course. At present we cannot predict the outcome of the individual case.

The implications of these findings for planners center around the need for flexibility of treatment resources so that patients can have crisis intervention for acute episodes, as well as continuing care as needed. Whatever the intensity of treatment, it should be planned longitudinally to provide continuity and accessibility. In this regard, depression shares many features of nonpsychiatric chronic diseases (13). Current health policy in the United States is focused on chronic diseases with high mortality. Mental disorders that have a high morbidity and potential mortality, such as depression, also require long-range comprehensive planning.

The conventional psychiatric literature has emphasized the tendency for neurotic depressions to be relatively benign (12), to resolve rapidly, and to leave minimal cognitive impairment between episodes. In fact, our results indicate that there are often chronic or intermittent residuals, which impair the personal lives, personal happiness, and family adjustment of such patients.

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Current Issues in National Insurance for Mental Health Services

BY SCOTT H. NELSON, M.D., M.P.H.

The current economic crisis has again placed in jeopardy the inclusion of mental health benefits under national health insurance. The author notes that progress has been made in establishing effective peer review systems and in demonstrating that costs of mental health services are reasonable. Yet the lack of agreement on diagnosis and appropriate treatment, the inadequacy of utilization, cost, and treatment outcome data, and the absence of professional self-regulation remain causes for concern in the effort toward eventual comprehensive coverage for mental disorders.

CONSIDERABLE PROGRESS was made vis-à-vis the inclusion of mental health benefits in proposed national health insurance legislation over the 3 years from 1972 to 1974. In 1972 relatively few proposals provided any substantial coverage of mental disorders; in 1974 virtually all the major proposals submitted to Congress contained a significant (although limited) benefit package. Most striking was the change in the proposal put forth in 1974 by the President; it shifted from no coverage at all to a respectable benefit package of 30 inpatient or 60 partial hospitalization days and 15 individual visits to a private practitioner or the cost equivalent of 30 individual visits in an "organized care setting" (OCS). The reasons for the shift are complex but probably have to do with the recognition by lawmakers and social policy officials of the substantial need for coverage of mental disorders, as well as with the pressures that were applied by a variety of constituency groups.

In 1974 there was as much agreement on the benefit package that should be offered under national health insurance as we are likely to see for some time. Arguments came not over the services to be covered, but over such technical aspects as the mechanism of financing (i.e., through private insurance carriers or the federal government) and voluntary versus compulsory enrollment.

In 1976, however, the economic crisis, with its accompanying recession, rising costs and prices (especially in the area of health care), and unemployment, has been the major factor in a changed situation. Economic concern has caused legislators and policy makers to scrutinize expensive proposals such as national health insurance (NHI) with increasing care. As in 1972, the matter of what benefits might be covered under any national health insurance law is again an open question.

In times of economic constraint, mental health benefits are often unfortunately among the first to be considered for exclusion. Recently considerable pressure has been placed on Congress to consider the elimination of mental health, drug abuse, and alcoholism benefits in the Health Maintenance Organization (HMO) legislation; these benefits are already limited to 20 outpatient mental health visits and detoxification services for alcohol and drug addiction. Since they became law in 1965, Medicare and Medicaid have routinely limited the amount of coverage for care of mental disorders, particularly outpatient care.

Yet new evidence has been put forth by Brenner (1) indicating that during economic crises, with their concomitant social and personal stresses, the incidence of mental disorder, drug abuse, and alcoholism rises dramatically, as expressed by increased demand for services for these conditions during such periods.

ARGUMENTS FOR INCLUSION OF MENTAL HEALTH SERVICES

The best known argument of proponents of financial entitlement for mental health services is the logical one of fairness—that adequate services should be financially available to persons with alcohol, drug abuse, or emotional problems just as they are for other health problems. But this position has been explicitly challenged by legislators and policy makers from several points of view. Such individuals contend that there are inadequate criteria for determining when a person has a problem that requires service, i.e., that service is often determined more by patient demand rather than by objective, scientific criteria of need. Opponents of mental health coverage also argue that a definition of "adequate services," either type or amount, is not available for most mental health conditions and that many of the services provided by mental health practitioners cannot legitimately be called "health" services. At least one further difficulty is that much of the care of chronic patients and the poor has been provided by publicly funded institutions that have had

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little access to other reimbursement systems; because of tradition and bias there appears to be resistance to the idea of changing this system of providing and paying for care.

Given the relative lack of acceptance of adequate coverage that has been encountered in many policy- and law-making areas, proponents of quality care for mental disorders, drug abuse, and alcoholism have recently focused on two more specific arguments for inclusion of benefits for such care under national health insurance. These arguments are based on projections of reasonable cost and plans for improved accountability for services rendered.

COSTS OF MENTAL HEALTH CARE

Recent experience in covering mental health treatment under insurance plans indicates that the cost is not excessive and does not rise at rates that are out of proportion to those of physical illness. Reed and associates (2) reported several studies showing that the utilization of mental health services under insurance plans is low and therefore that the cost of mental health services in comparison with costs for physical conditions is reasonable.

Some of the low percentage costs of mental health coverage under insurance plans can be explained by the restrictive limits on care in some of the plans. However, even in those few plans that provide nondiscriminatory coverage, such as some of the carriers[1] in the Federal Employees Health Benefits Program, the proportion of costs has ranged between 7.5% and 12% (3), probably averaging slightly less than 10%.

Many have pointed out that trend data over the past 4 years indicate that the percentage of total expenditures for mental health care under one of these federal employee plans (the Blue Cross and Blue Shield plan) appears to be plateauing at about 7.5% (4). Some have concluded that since coverage for mental health services is complete under this plan (except for the $100 deductible and 20% copayment by the patient), percentage costs for mental health coverage are unlikely to rise above this 7.5% level.

Unfortunately, the plateau phenomenon seen in the Blue Cross and Blue Shield plan does not tell the whole story. The reason for this is that until recently, as already noted, there was more than one carrier with essentially nondiscriminatory mental health benefits. Federal employees may switch insurance carriers during an open enrollment period once each year; therefore, the plateau phenomenon could be explained either by stable percentages of cost *or* by shifts in the users of psychiatric benefits from one insurance plan to another. In the past year, the Blue Cross and Blue Shield plan has become the *only* carrier to offer the nondiscriminatory mental health benefit. Data from the next 2 or 3 years' experience therefore will be needed before it is known whether or not the plateau is genuine.[2]

Projections of what overall percentage of total health costs might be spent for either limited or unlimited mental health services under national health insurance are difficult to make. This is because utilization patterns differ considerably according to the population covered. For example, the United Auto Workers were found to have a lower utilization of benefits than would have been expected on the basis of an assessment of need and their financial entitlement (5). On analysis, this phenomenon was felt to be based on the perceived stigma of mental health treatment, the lack of knowledge that a psychiatric benefit was included in the insurance plan, and the lack of belief in the effectiveness of mental health care (6).

In contrast, in the Washington, D.C., area there is the highest rate of utilization of mental health services in the nation. This is explained in part by the fact that a large number of mental health professionals, particularly psychiatrists and psychologists, are located in Washington and that psychologists as well as psychiatrists are eligible for reimbursement under the two largest federal employee plans. In addition, federal employees are a well-educated group who work under conditions of considerable stress in the highly political metropolitan Washington environment. Conditions of high stress are known to lead to psychiatric symptoms, and education also correlates strongly with use of mental health services.

If unlimited mental health benefits were included under national health insurance, utilization rates would vary by geographic area but probably would average substantially less than that of the nation's capital.

EFFECTIVENESS OF REVIEW PROCEDURES

The second argument that is commonly used to justify inclusion of mental health benefits under national health insurance is that mechanisms of accountability, particularly in the form of peer review, will be effective. Increasingly concerned with the review of insurance claims for mental disorders, and under increasing pressure from the public and the courts to correct abuses and provide high quality care, the fields of psychiatry and psychology have instituted peer review committees in local professional associations and in some mental health service settings. Psychiatrists have been active participants in the development of standards and in the implementation of the Profes-

[1]In 1975 the Aetna plan cut back its benefit for outpatient treatment of mental and nervous disorders to 20 visits a year (40 if the service is provided by a qualified community mental health center).

[2]Newly available Blue Cross and Blue Shield data indicate a continuation of the plateau in 1975; mental health costs comprised 7.5% of total health costs in 1975 compared to 7.2% in 1974 and 7.3% in 1973. Total mental health costs, however, increased by $20 million (to $90.8 million) in 1975, compared to increases of less than $10 million per year in the previous 4 years. Total health costs also rose sharply in 1975, accounting for the constancy of the percentage of total costs spent for mental health care.

sional Standards Review Organization (PSRO) program (7).

The increased scrutiny of clinical practice resulting from review processes will undoubtedly lead to more attention by mental health professionals to delivering an appropriate quantity and quality of care. However, one of the problems is that the outcomes of psychiatric treatment are not demonstrable in as objective and scientific a way as are the results of the treatment of such conditions as pneumonia and appendicitis by other branches of medicine. Mental health professionals may disagree about the diagnosis for a given patient, and even when there is agreement on diagnosis there may be differences concerning the modality of treatment that should be used. This situation makes the justification of an appropriate type and length of treatment difficult.

Still, it is reasonable to expect that with more stringent review of care mental health professionals will curtail what might be judged by their peers (and even by others) as inappropriate service. In addition, the peer review process will serve the function of continuing education for those practitioners who need it. With more definitive studies on the outcome of various treatment modalities, the process of peer review will be an even more effective vehicle for assuring appropriate and adequate care, and will assist with the objective of cost containment as well.

The Community Mental Health Center of Peninsula General Hospital, located in Burlingame, Calif., has used a peer review system for the past 4 years and has found it to be an effective way of staying within its allocated budget for treatment provided to certain groups of patients (8). Another example of effective peer review is seen in the cooperative working agreement between the National Institute of Mental Health and the Department of Defense in which the care delivered in residential treatment facilities for emotionally disturbed children is being reviewed by 20 interdisciplinary mental health teams. This review process was initiated because of evidence of grossly inadequate inpatient treatment for children whose care was being paid for by the Civilian Health and Medical Program for the Uniformed Services (CHAMPUS) program, which primarily serves military dependents. On the basis of this review, more than half of the claims for reimbursement for care of children hospitalized more than 120 days were disallowed, and CHAMPUS has taken steps to disqualify many of the facilities from reimbursement because of their failure to meet professional standards. While the CHAMPUS situation is probably not representative, it does illustrate the potential utility of the peer review process as a mechanism for both quality of care and cost containment.

COST CONTROL VERSUS NEED AND DEMAND

One of the major concerns of opponents to coverage of mental disorders under national health insurance is that the demand for services may be directly related to an individual's insurance entitlement as well as to the manpower available to provide treatment.[3] Yet a recent survey (9) indicated that the rate of utilization of mental health services by uninsured individuals was no greater than that of persons who were insured. Still, because the mental health field has inadequate criteria to define the need for treatment and frequently does not agree on diagnosis or treatment modality, the task of convincing economists and social policy makers that there is a circumscribed amount of need will be difficult.

Skeptics also point out discrepancies in arguments with regard to need and cost. They point out that on the one hand mental health practitioners are encouraging patients to recognize symptoms and to seek care early in the course of their troubles. If everyone did this, substantial increases in demand for services might be generated and the proportion of costs expended for mental health care eventually could rise to levels that are unacceptable to policy makers. On the other hand, using the argument that utilization is low and therefore cost of coverage is reasonable as an argument for including mental health services contradicts the goal of early and frequent treatment (which may in turn save the subsequent cost of more extensive care). It also does not address the issue of the need for financial support of adequate amounts and quality of care (assuming that a widely acceptable definition of "adequacy" could be developed). Indeed, to invoke the low percentage of total health insurance cost as an argument for including mental health coverage under NHI may create an undesirably low expectation for the cost of mental health service, when estimates and data show that mental health costs are actually about 15% of total health costs, both in this country and abroad (10, 11); this figure includes public mental hospital care.

One strategy being considered for dealing with the desire to both control costs and assure optimum allocation of resources is the establishment of a financial ceiling on the amount available for coverage of mental disorders, allowing local practitioners to divide the "pot" according to which individuals are felt to need treatment most. Many administrative problems would result from attempting to implement such a strategy, but it appears to be a concept that is being considered increasingly by some policy makers.

Another option that has been proposed is to provide financial entitlement only to those persons who have emotional conditions that are based on definitive physical (i.e., medical) causes, such as psychoses and brain syndromes. Treatment for other conditions would have to be financed in some other way. Yet many conditions, even among the psychoses, have no clearly demonstrated physical causes.

A more likely first step in the current economic cli-

[3]It would be useful to study whether this is more the case for mental than for physical conditions.

mate is the passage of catastrophic (rather than comprehensive) legislation, in which health expenses above a specific dollar level would be reimbursed. The best-known proposal, the Long-Ribicoff Bill (S-2470), would also provide for nationalization and improvement of the Medicaid program and modifications to Medicare and would establish certain requirements for insurance companies providing routine coverage. While the catastrophic approach has limitations in that it does not provide the leverage for needed change in the total health system, it does offer some opportunities for improved mental health, drug abuse, and alcoholism coverage in preparation for eventual implementation of a more comprehensive insurance program.

NONPHYSICIAN MENTAL HEALTH PROVIDERS

If the need for mental health services cannot be defined in an objective sense, and if significantly increased demand may be generated with more liberal financial entitlement to service, the number of providers who are eligible to deliver services and obtain reimbursement becomes a significant cost issue. Psychologists are rapidly achieving equity with psychiatrists in the delivery and reimbursement for mental health services, and other mental health professionals such as social workers and nurses are not far behind in their demands for recognition as independent practitioners.

Unfortunately, reimbursement criteria are usually drawn along disciplinary lines rather than by measures of which practitioners have the appropriate training, experience, and competence and thereby merit payment for their services. It has been suggested that criteria are needed by which the competence of trained and experienced clinical practitioners, regardless of discipline, can be judged and through which reimbursement for services delivered can be made (12).

Certification and recertification, with provisions for continuing education, should also be required. It is striking in this regard to note that the field of psychiatry does not require specialty certification of psychiatrists; in addition, there is no required system in any mental health discipline to assure continued proficiency or familiarity with new developments in the field, although at least three states (New Mexico, Maryland, and Oregon) now require some continuing education for relicensure of physicians. Such self-regulation activities as certification, recertification, and continuing education should be paramount concerns for the mental health disciplines, particularly with the increasing public concern with quality care and malpractice.

CONCLUSIONS

With continuing concern on the part of economists and policy makers about the rising costs of health care and the need for improved accountability, the field of mental health finds itself in a particularly vulnerable position. Better and more broadly ranging data from insurance and other financing mechanisms need to be collected and disseminated. In many cases such data will not be available without restructuring of current information-gathering practices. Research that demonstrates the effectiveness of various modalities and patterns of treatment is also vitally needed. One can hope that involvement in maintaining and improving systems of peer review will continue to be supported by all mental health professionals.

Whether or not these efforts will be made depends upon the ability of mental health practitioners to take on new roles and clear responsibilities with regard to the costs of and financing policies related to their patients' care. In addition, the abandonment of parochial disciplinary stances in favor of reimbursement criteria based on standards of competence would go far toward lending credibility to the mental health care system. Indeed, some of the most cherished traditions of treatment may need to be examined and changed in accordance with criteria of improved cost effectiveness. Failing this, the mental health field will doubtless continue to be viewed with suspicion and alarm by legislators and policy makers, and increasing numbers of patients who genuinely need mental health services in the future may go without them.

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Agitated Psychotic Depression Associated with Severe Hypomanic Episodes: A Rare Syndrome

BY JONATHAN M. HIMMELHOCH, M.D., PATRICIA COBLE, R.N., DAVID J. KUPFER, M.D., AND JANE INGENITO, R.N., M.S.N.

The authors present detailed clinical and follow-up data on 12 patients with agitated psychotic depressions who developed serious hypomanic or manic episodes. In six patients, each type of affective episode seemed to merge into the others, while in the other patients there was always a clear temporal distinction between each type of episode. The authors suggest that the older ages of their patients may have contributed to the syndrome. They also offer several possible theoretical explanations: the patients 1) had mixed affective states and were trapped in the "switch" state from depression to mania, 2) inherited both unipolar and bipolar diseases, 3) represent a subgroup of bipolar patients, and 4) were schizoaffective.

Things are seldom what they seem,
Skim milk masquerades as cream,
Highlows pass as patent leather,
Jackdaws strut in peacocks' feathers.

—W.S. GILBERT
H.M.S. Pinafore

KRAEPELIN'S EVENTUAL decision to include under the broad concept "manic-depressive insanity" each of the clearly described depressive syndromes he had so carefully differentiated (1, 2) has had confounding effects on succeeding generations of psychiatric theoreticians. Kraepelin's immediate psychiatric descendants accepted his final decision and, ignoring his earlier clinical differentiations, telescoped his various depressive categories into the single concept of "endogenous depression." This compression of variety was facilitated by Kraepelin's even earlier decision to separate acquired from constitutional psychiatric illness (3). By 1929 the dualistic reactive-endogenous concept of depressive disorders had developed (4). This view reigned over psychiatric thinking until the past decade, when it has been challenged by "pluralistic" or categorical conceptualizations, recently discussed by Klein (5). However, recent classification systems are implied in Kraepelin's descriptions if not in his theory.

Nevertheless, for most of this century "endogenous depression" has been synonymous with the "melancholia" of Galen, Burton, Sydenham, and Willis (6)—namely, severe depression characterized by apprehension, agitation, severe sleep disorder, nihilistic and somatic delusions, and delusions of sin. A natural consequence of this thinking has been the identification of melancholia as the depressed phase of manic-depressive illness, as can be seen in the works of Freud (7), Abraham (8), and numerous other investigators up to the present time.

But Kraepelin originally did not believe that melancholia, which he called "apprehensive depression," was the depressed phase of manic-depressive illness (2). He reserved motor retarded, "volitionally inhibited" states for this role. Evidence (9, 10) that bipolar affective disorder is genetically different from unipolar affective disorder has revived interest in this distinction as a means of clinically separating the depressive phases of these two genetic subtypes of primary affective disorder.

Beigel and Murphy (11) have produced evidence which strongly suggests that motor retardation is the identifying clinical characteristic of the depressed phase of bipolar illness. Detre and associates (12) and Kupfer and associates (13) showed with all-night sleep EEGs and telemetric analysis of mobility that individuals with bipolar depression are usually hypersomnic and motor retarded while individuals with unipolar depression are usually hyposomnic and agitated. There is also evidence that biochemical (14, 15), endocrinological (16, 17), perceptual (18, 19), and pharmacological (20, 21) differences separate retarded bipolar depression from agitated unipolar depression (one form of which is classical melancholia).

In reality, agitated psychotic depression is rarely associated with clinically significant hypomania or mania. While patients frequently describe a brief period of mild euphoria when an agitated depression lifts (22), the elation lasts for only a short time before

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the patient resumes the mildly anxious and obsessive style that marked his premorbid personality. From 7 years' experience in two major clinics for affective disorders in which we have treated over 800 patients, 550 of whom were clearly manic-depressive, we know of only 12 patients with agitated psychotic depressions who went on to develop hypomanic or manic episodes long enough or severe enough to produce social disruption and merit pharmacological intervention.

It is the purpose of this paper to report detailed clinical and follow-up data about this select group. We believe these data have important theoretical and clinical implications for the understanding of the nature and treatment of affective disorders.

METHOD

Clinical data were obtained using the Kupfer-Detre System (KDS) (23) and thorough clinical interviews. The KDS is a combination of clinician-administered and self-administered questionnaires that is an effective tool for compilation and analysis of detailed neuropsychiatric, medical, family, and sociodemographic data. The history of one patient, who had committed suicide 3 years earlier, was gathered retrospectively from her twin sister. This patient was the only one in the group with any history of sedative, alcohol, psychomotor stimulant, or psychedelic drug abuse. All-night sleep EEGs were performed in 4 patients when they had been drug free for at least two weeks. The sleep records were analyzed according to methods previously described (24).

RESULTS

Demographic, Anamnestic, and Follow-Up Data

Eleven patients were 45 or older, 8 were women, and 6 were Jewish. Of particular interest is the fact that 10 of the subjects (excluding patients 7 and 10) had strong family histories of affective disorders. Patients 8 and 11 clearly had both typical unipolar and typical bipolar family members. Five subjects (patients 1, 2, 3, 5, and 12) seemed to have only bipolar illness in their backgrounds. There was one set of identical twins in the sample (patients 2 and 3) and 1 patient who had an identical twin not included in the study (patient 12); both sets were concordant for this particular affective syndrome.

Five subjects (patients 1, 5, 6, 9, and 11) had been diagnosed by other clinicians as schizo-affective, but careful analysis showed that all of their psychotic and cognitive symptoms were acute, episodic, and affective in nature. Residual, interepisodic symptoms were invariably of an affective type.

Preoccupation with suicide was a prominent feature of these patients' histories. Eight patients (1, 2, 3, 6, 8, 9, 11, and 12) had suffered from suicidal ideation during their acute depressions. Seven of these (excluding patient 12) had made serious suicide attempts, with patient 3 succeeding. The suicide attempts and gestures of 5 patients were remarkable for their violent means (stabbing, slashing, and shooting). Suicide was also a prominent factor in the family histories of these patients.

Finally, these patients seem more difficult to treat than either typical unipolar or typical bipolar patients. Follow-up periods have ranged from 18 to 36 months, and treatment response has been less than optimal in 10 patients. Two subjects (patients 3 and 9) were treatment failures; 1 committed suicide, and the other was chronically institutionalized. Four subjects (patients 1, 6, 8, and 10) had significant symptomatic improvement after treatment with lithium carbonate but never experienced total remission and needed much psychological support, frequent changes in lithium dosage, and occasional adjunctive treatment with tricyclic antidepressants or monoamine oxidase (MAO) inhibitors. Four others (patients 4, 5, 7, and 11) experienced symptomatic remission with lithium carbonate but needed frequent changes of dose. Two of them (patients 7 and 11) needed an MAO inhibitor (tranylcypromine) when their anergic depressive symptoms resumed. Only 2 subjects (patients 2 and 12) experienced complete remission.

Analysis of Most Recent Agitated Episode

The 12 patients are divided into groups 1 and 2 because their agitated depressed episodes evolved in distinctly different ways after they were placed on tricyclic antidepressants.

All 6 patients in group 1 were grossly psychotic (see table 1). Their dysphoria was severe and seemed linked to striking nihilistic and somatic delusional material. (Of the 6 patients in group 2, only 2, patients 8 and 9, showed this degree of disintegration, while another, patient 11, experienced mild somatic delusions.) After administration of tricyclic antidepressants there was a moderately rapid (7–14-day) reduction in the patients' intense dysphoria, accompanied by the appearance of paranoid/irritable symptoms in the place of somatic, nihilistic, or guilt-laden delusions. Over the succeeding 4–10 days the delusions ceased (all subjects except patient 3 received major tranquilizers as needed), and a clear-cut euphoric hypomania developed, which was treated with lithium. With these patients it seemed as if each type of affective episode (retarded depressive, agitated depressive, manic, and hypomanic) merged into the others.

On the other hand, 4 subjects in group 2 (patients 7, 8, 9, and 11) failed to show any response to tricyclic antidepressants (see table 2). The 2 subjects (patients 10 and 12) who did become hypomanic while receiving amitriptyline never experienced a paranoid/irritable phase. With the patients in group 2, there was always a clear temporal distinction between each type of affective episode.

TABLE 1
Analysis of Most Recent Agitated Episode for Patients in Group 1

Patient	Age	Clinical Features	Acute Course and Response to Medication	Suicidal Ideation/Attempts During Episode	EEG Sleep Data
1	59	Early morning awakening, severe hyposomnia, agitation, somatic delusions (his body was rotten, and his heart had turned to stone). Gave no history of manic episodes at time of acute episode, only after he had become hypomanic.	Treatment was started with 200 mg of doxepin (Sinequan) and haloperidol (Haldol) as needed. After 10 days he became agitated and increasingly paranoid and irritable. Somatic delusions ceased. In 4 more days irritability was replaced by clear-cut euphoric hypomania requiring treatment with lithium.	Brought in a gun with bullets. Had also thought of slashing his wrists.	—
2	54	Severe agitation, hyposomnia, early morning awakening, nihilistic and somatic delusions (she was a skeleton and was deteriorating and putrid).	Treatment was started with 200 mg of amitriptyline (Elavil) and thioridazine (Mellaril) as needed. Delusions became grandiose after 8 days; after 3 more days the delusions ceased and the patient became clearly hypomanic, requiring treatment with lithium.	No suicide attempt during this episode. Had taken a massive drug overdose during a previous episode and nearly died.	—
3	50	Twin sister of patient 2. Severe agitation, hyposomnia, and delusional depression complicated by addiction to sedatives, which ended in suicide.	No real trial with any antidepressant medications.	Committed suicide.	—
4	63	Early morning awakening, marked disturbance in sleep continuity, agitation, compulsive pacing, auditory hallucinations (accusatory voices), and somatic delusions of death and deterioration.	Treatment was started with 200 mg of amitriptyline and perphenazine (Trilafon) as needed. After 10 days became increasingly agitated; quality of delusions became grandiose. After 10 more days became nondelusional but was clearly hypomanic and required lithium therapy.	No suicidal ideation or attempts.	Short REM latency, no delta sleep.
5	54	Early morning awakening, disturbance in sleep continuity, 15-pound weight loss, severe agitation and hyposomnia; somatic symptoms led to nihilistic delusions.	Treatment was started with 200 mg of amitriptyline and thioridazine as needed. After 10 days became more agitated and irritable, with systematized ideas of reference, then grandiose delusions. After 10 more days delusions and paranoid ideation ceased, but severe hypomania necessitated treatment with lithium.	No suicidal ideation or attempts.	Short REM latency, no delta sleep.
6	48	Depressed with many somatic complaints. Severe hyposomnia, agitation, early morning awakening, disturbance in sleep continuity, weight loss, delusions of guilt, God, and the Devil, somatic delusions, and auditory hallucinations (accusatory voices).	Treatment was started with 150 mg of amitriptyline and trifluoperazine (Stelazine) as needed. After 7 days became giddy; religious delusions became grandiose, with much bizarre sexual material; became markedly hyperalert, labile, irritable. After 7 more days delusions and dysphoria ceased. Was obviously hypomanic and euphoric on first outpatient visit and required lithium therapy.	Attempted to stab herself when religious delusions were accompanied by accusatory hallucinations.	Short REM latency, no delta sleep.

TABLE 2
Analysis of Most Recent Agitated Episode for Patients in Group 2

Patient	Age	Clinical Features	Acute Course and Response to Medication	Suicidal Ideation/Attempts During Episode	EEG Sleep Data
7	46	Disturbance in sleep continuity, early morning awakening, agitation, hyposomnia, self-deprecation. No psychotic features.	No response to 4 weeks of treatment with tricyclic antidepressants. Depression gradually lifted coincident with lithium therapy but may have run its course anyway.	None.	—
8	64	Depressed 4 years earlier, with severe agitation, early morning awakening, disturbance in sleep continuity, hyposomnia, somatic symptoms, delusions of sin.	Confusional state in response to treatment with imipramine (Tofranil) and amitriptyline; poor response to ECT and isocarboxazid (Marplan). Discharged with only moderate improvement after 7 months. Showed marked improvement when lithium therapy was started 4 years later.	Cut her throat while in the hospital.	—
9	32	Intensely hyposomnic, early morning awakening, disturbance in sleep continuity, severe agitation, somatic and nihilistic delusions, delusions of sin, auditory hallucinations.	No response to 3 weeks of treatment with amitriptyline and thioridazine. Transferred from surgical unit to a psychiatric hospital. Treated with lithium and tranylcypromine (Parnate) because of history of anergic depression and hypomanic episode; seemed to improve.	Severed the flexor retinaculum of her hand and underlying nerves and tendons in a suicide attempt.	—
10	52	Early morning awakening, disturbance in sleep continuity, anxious, agitated, hyposomnic, weight loss. No psychotic features.	No marked improvement with tricyclic therapy; gradually (8–9 weeks) became hypomanic. Improved somewhat with lithium therapy.	None.	—
11	45	Agitated, hyposomnic, disturbance in sleep continuity, early morning awakening. Somatic delusion that she had syphilis, as her father had; delusions of guilt.	No response in the past to treatment with tricyclics and chlorpromazine (Thorazine). Delusions and agitation decreased with lithium therapy. Rapid remission of symptoms when tranylcypromine therapy was started after suicide attempt in the hospital.	Cut her wrist in the hospital and required stitches. Previously had taken a drug overdose.	—
12	59	Severe depression with suicidal ideation, early morning awakening, disturbance in sleep continuity, hyposomnia, agitation, somatic concerns, 6- to 8-pound weight loss. No psychotic features.	Treatment with 200 mg of amitriptyline was started; gradually improved over the next 2 weeks, then became markedly hypomanic. Lithium therapy was started; complete stabilization of symptoms.	Constant suicidal ideation.	Short REM latency, no delta sleep.

EEG Sleep Data

We were able to study the sleep of 4 patients, 3 from group 1 (patients 4, 5, and 6), and 1 from group 2 (patient 12). All 4 showed typical unipolar sleep characteristics (see tables 1 and 2). All-night sleep data for these 4 patients were also compared with those of 1) a group of nonpsychotic unipolar depressives, and 2) a group of psychotic unipolar depressives. There were no significant differences on any measures.

DISCUSSION

General Considerations

The most important fact about this subgroup of patients is the rarity of their syndrome. A small number of bipolar patients do suffer mild-to-moderate agitation and hyposomnia during their depressive phase, but in our experience (25) such patients are almost invariably abusing alcohol, central nervous system sedatives, or minor tranquilizers, and their agitated state never progresses to the development of full-blown somatic and/or nihilistic delusions. Careful anamnestic investigation usually demonstrates the anergic hypersomnic nature of earlier depressive episodes not contaminated by sedative medications. Moreover, all-night sleep EEGs show measurements typical of sedative abuse and/or withdrawal instead of unipolar depressive illness (24).

Only 1 patient described here had ever abused drugs, and she was included in the sample because she was the identical twin of patient 2 and probably suffered from identical depressive episodes before she committed suicide. Three patients had significant medical problems, but while these illnesses may have contributed to the content of their somatic and nihilistic delusions, medical illness could not be invoked as the cause of their affective disorders or as an explanation for the quality of their behavior.

There is no other external factor except age to which the presence of agitated and psychotic features could be attributed. Eleven patients were 45 or older; 8 were 50 or older. Previous factor analytic studies (e.g., 26) have consistently demonstrated that the older the patient, the more likely that his affective syndrome will be of severe or psychotic proportions. It could be postulated that our patients are a group of bipolars in whom advancing age, for one reason or another, has had particularly devastating effects. However, in our experience the catastrophically disorganizing effects of age on the course and prognosis of affective disorders have been almost exclusively limited to unipolar patients. Most bipolar depressive patients remain anergic and nonpsychotic regardless of their age. In these cases we hypothesize that aging either 1) emphasizes the dysphoric core of mania to such a degree that it resembles a psychotic depression or 2) alters and erodes the patient's defensive structure to such a degree that it allows the unipolar part of his heredity to show through. Aging probably also plays a role in these patients' poor response to pharmacological intervention.

Theoretical Considerations

Clinical differences between the patients in groups 1 and 2 give rise to a number of possible theoretical explanations for the source of this rare syndrome, particularly if these possibilities are examined in the framework of the genetic, clinical, and psychophysiological separation of bipolar from unipolar affective disorder.

The Possibility of Mixed States

These syndromes might be conceptualized in terms of the original Kraepelinian description of mixed affective states (1, 2), which are characterized by simultaneous manic and depressive features and are usually experienced by the subject as intensely dysphoric. Court (27) and Bunney and associates (28–30) have used these states as evidence for developing the continuum hypothesis of manic-depressive illness. This theory states that depression and mania are not polar opposite states, but are closely related entities that are probably only quantitatively different. Depression represents mild to moderate illness and mania, severe illness. Mania is viewed as a state with a depressive core, a concept that is clinically supported by the manic patient's tendency to suddenly become sad and tearful in the midst of his excitement, irritability, and grandiosity. Mixed states represent transitional periods as depression switches to mania (the "switch process"), where a patient becomes trapped in the "switch" state. The result is a severely dysphoric and potentially psychotic state. Bunney and associates (28–30) have reported that urinary norepinephrine and cyclic adenosine monophosphate (CAMP) levels are markedly elevated during this "switch" period. They have also noted a simultaneous decrease in overall sleep and rapid eye movement (REM) sleep. Hullin and associates (31) have disputed Bunney and associates' findings of elevated CAMP levels.

Patients in group 1 could easily be seen as "trapped in the switch process." They were all initially dysphoric and psychotic. Under treatment with tricyclic antidepressants, the quality of their delusional material changed from depressive and nihilistic to paranoid/irritable. This sequence of events could be envisioned as the "switch." Unfortunately, we have none of the biochemical data elaborated by Bunney and associates to support this assumption; nor can we lend support to either Bunney and associates or Hullin and associates regarding urinary CAMP concentrations during the "switch" phase. Our 24-hour sleep EEGs do support Bunney and associates' (28–30) original findings.

After the "switch," these patients remained psychotically manic for only a short time before the intensity of their mania diminished to hypomanic levels. It is possible that the tricyclic antidepressants modified the dysphoric core of their manic episodes without altering any of the other qualities that define the manic process. The idea that tricyclics have ameliorating effects on mania has been held by a number of investigators (32).

The Possibility of Mixed Heredities

A second way of viewing these patients is that they might have inherited both unipolar and bipolar diatheses. Given the existence of two separate gene pools, it is logical to assume that such mixed illnesses exist. There were only 2 patients in our study who clearly had both heredities. Both of these patients were in

group 2, and patients in group 2 might be more easily conceptualized in this light. The fact that each patient had experienced both retarded and agitated depressions and that each affective episode was clearly separate from the other makes it seem possible that these patients were suffering from two separate illnesses occurring at different times.

The Possibility of a Separate Subtype of Affective Disorder

There are no compelling reasons to assume that either the unipolar or the bipolar depressive population is homogeneous. There have been a number of attempts to tease out subgroups from each of these populations. Winokur and associates (33) have suggested that the unipolar group can be further broken down into "young onset-female" versus "old onset-male" according to family history. Kupfer and associates (34) have described a subgroup of unipolar hypersomnic retarded depressive patients. Of more interest is a subgroup of bipolar patients labeled by Dunner and associates (17) as "bipolar II":

> In some respects, such as family history, the . . . bipolar II group . . . would seem to be closely related to the bipolar group, perhaps representing individuals with a less severe form of affective illness, reflected in hypomania rather than mania. On the other hand it is our clinical impression that the hypomania . . . is qualitatively as well as quantitatively different from mania. For example euphoria, generally characteristic of hypomania is not universally present in "full-blown" mania. Mania, in fact, may be better described as . . . [dysphoria]. In addition psychotic symptoms are often seen during mania but not during hypomania. Also in our follow-up study we have noted that the . . . "bipolar II" group accounted for a disproportionate number of the patients who committed suicide after discharge from the unit. (p. 363)

There are striking similarities between Dunner and associates' group and our 12 patients, particularly those in group 1. One can postulate, as we have for our patients, that their patients' higher suicide rate may well be secondary to a severe dysphoric and psychotic process that is experienced by the patient in a nihilistic rather than in a grandiose or paranoid way. The relationship between this process and hypomania may be the same as the relationship between mania and hypomania because this state and mania *are* the same process but are experienced and manifested differently.

The Possibility of a Schizo-Affective Disorder

In a study of 420 monozygotic twins concordant for schizo-affective disorder, Cohen and associates (35) pointed out the high incidence of manic-depressive illness in their patients' family trees and also demonstrated an extremely high suicide rate for their patient population. In an attempt to develop more precise criteria for the diagnosis of schizo-affective disorder, Croughan and associates (36) defined the following two groups of patients: 1) 94 patients with predominantly thinking disorders and two few affective features to meet the criteria for a diagnosis of depression or mania, and 2) 110 patients with "two or more qualitatively different thought or behavior disorders in addition to affective symptoms sufficient to meet criteria for [the diagnosis of] depression or mania" (p. 634). This second group also exhibited a significantly higher occurrence of delusions of sin and tended to have a chronic course of illness that was predominantly affective in nature.

It is obvious that many of our 12 patients, particularly those 5 who had been diagnosed at one time or another as schizo-affective, could be viewed in much the same way as either Cohen and associates' twins (35) or Croughan and associates' second subgroup of schizo-affective patients (36). We do not feel, however, that any of our 12 patients were schizo-affective, since their syndromes could be described entirely according to criteria for pure affective disorder. It is probable that the diagnosis of schizo-affective disorder contains a number of poorly understood subtypes of primary affective disorder. But whatever the case, there seems to be little doubt that patients such as ours are more labile, impulsive, suicidal, needy, and difficult to treat than are patients with more typical affective syndromes.

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Immunoglobulin Levels in Psychiatric Patients

BY MEIR STRAHILEVITZ, M.D., JULIAN B. FLEISCHMAN, PH.D., GREGORY W. FISCHER, M.D., RICHARD HARRIS, AND NEDATHUR NARASIMHACHARI, PH.D.

In a study of 19 schizophrenic patients, 7 nonschizophrenic patients, and 31 controls, the authors found significantly higher mean serum levels of 1) immunoglobulin A in schizophrenic women than in control women and in schizophrenic blacks than in either schizophrenic whites or black controls, 2) immunoglobulin D in schizophrenic blacks than in schizophrenic whites, 3) immunoglobulin M in controls than in nonschizophrenic patients, and 4) immunoglobulin G (IgG) in schizophrenics whose urine was positive for phenothiazines than in schizophrenics whose urine was negative for phenothiazines. High serum levels of IgG were associated with no or mild hallucinations and low levels with moderate or severe hallucinations. Black female patients had significantly more severe hallucinations than white female patients. The authors discuss the possible implications of these findings.

THE STUDIES ON serum immunoglobulins in psychiatric patients that have been published to date have not, to our knowledge, included evaluations of serum immunoglobulin D levels. They also have not included a detailed evaluation of the relationship between various behavioral variables and serum levels of immunoglobulins.

In the present study, we determined the serum levels of immunoglobulins G, A, M, and D (IgG, IgA, IgM, and IgD) in psychiatric patients and healthy controls, as well as in various diagnostic groups of patients. We evaluated the relationship between the serum levels of the various immunoglobulins and the severity of thought disorder, hallucinations, delusions, and affect disturbance in the psychiatric patients.

Solomon and associates (1) reported a significant elevation in mean IgM and IgA levels in the serum of psychiatric patients as compared to "healthy" controls. However, they found no significant difference in mean serum IgM and IgA levels of schizophrenic and nonschizophrenic psychiatric patients.

Amkraut and associates (2) found that schizophrenics with a high serum IgA level had a poor prognosis.

Strahilevitz and Davis (3) determined the levels of IgG, IgM, and IgA in the serum of schizophrenic patients, nonschizophrenic psychiatric patients and healthy controls, in samples taken within 24 hours of hospital admission. They found a significantly higher level of IgA in schizophrenics compared with healthy controls and nonschizophrenic psychiatric patients. There were no significant differences in levels of IgG or IgM between the schizophrenic group and the other two groups.

Hendrie and associates (4) also studied immunoglobulin levels in psychiatric patients and found that severe disorganizing levels of anxiety were correlated with increased serum IgA levels; in this study, the difference in serum IgA levels between the schizophrenic and the nonschizophrenic groups was not significant.

In another study, Hendrie and associates (5) determined the level of immunoglobulins in patients in an early phase of polyarthritis, and correlated immunoglobulin levels with the presence of the rheumatoid factor. The main finding was that patients with high levels of IgA and to a lesser extent IgM had a higher score on the Holmes social readjustment scale (which quantifies stressful life events) before the onset of polyarthritic symptoms. Bock and associates (6) found low serum IgM level in schizophrenics and low serum IgA level in a group of patients diagnosed as "borderline psychotic" compared to healthy controls.

METHOD

Evaluation of Patients

The patients were seen in the emergency room of the Malcolm Bliss Mental Health Center in St. Louis. Based on the behavior of the patients during the time of the psychiatric evaluation, all patients but one were rated on a 4-point scale (7) on the following 7 behavior-

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This is an abbreviated version of the paper presented; the original paper is available on request from Dr. Strahilevitz.

al variables: thinking disorder, disturbance in affect, delusions, hallucinations, social withdrawal, autism, and sum symptom score.

For each immunoglobulin, all patients were identified as having a high immunoglobulin serum level (above the median) or low immunoglobulin level (at or below the median). Similarly, each patient was rated on four behavioral variables (thought process disorder, delusions, hallucinations, and affect disturbance) as having no or mild disturbance (rated 0 or 1) or having moderate or severe disturbance (rated 2 or 3).

Information on drugs taken during the last two weeks before admission and information on medical illness were obtained from the relatives and the patient. A blood sample of 30 ml was taken from the patients by venous puncture immediately following the psychiatric evaluation, and a urine sample was also obtained from most of them within several hours after the completion of the evaluation. The blood was kept in a refrigerator at 4° C. until it clotted. The serum was then separated and stored in deep freeze at −17° C. Control serum samples were taken from hospital employees or blood bank donors. All serum samples were coded and were blindly tested for level of immunoglobulins. Urine samples were tested for the presence of phenothiazines by the Forrest universal test for phenothiazines (7).

Criteria For Diagnosis

The final diagnosis was made by the consensus of two psychiatrists who had no knowledge of serum immunoglobulin levels. Schizophrenia was diagnosed according to the criteria of Feighner and associates (8). Patients diagnosed as schizophrenic were further classified as acute, chronic, or chronic with acute exacerbation. The type of schizophrenic illness was defined according to *DSM-II* (9).

Description of Subjects

Schizophrenic patients. Nineteen of the patients included in the study were diagnosed as schizophrenic. Schizo-affective patients were considered a separate diagnostic group and were not included in the schizophrenic group. The urine test for phenothiazines was negative in 14 of the schizophrenic patients, positive in 3 and showed only a trace in 1. The urine of 1 patient was not tested. This group consisted of 10 women and 9 men and 11 blacks and 8 whites. The mean age of the schizophrenic group was 34±11.47 years.

Schizo-affective and nonschizophrenic patients. Of these 11 patients, 4 were diagnosed as schizo-affective and 7 received other diagnoses. Three had a diagnosis of primary affective disorder; 1, senile dementia; 1, possible senile dementia; 1, alcoholism; and 1, acute brain syndrome with mental retardation. The phenothiazine test of the urine was positive in 1 schizo-affective patient and negative in the other 10 patients. This group consisted of 5 women and 6 men and 8 blacks and 3 whites. The mean age of the schizo-affective and nonschizophrenic patients was 44.5±18 years.

Control subjects. Thirty-one hospital employees and blood bank donors were used as "healthy" controls. We had no medical or psychiatric information on these subjects. The group consisted of 16 women and 15 men and 14 blacks and 17 whites. The mean age of the control group was 30.8±11.10 years.

Determination of Indolethylamine-N-Methyltransferase

Serum enzyme levels were determined in all patients but one, and in 11 of the control subjects. The method used for the determination of serum indolethylamine-N-methyltransferase utilized thin-layer chromatography, gas liquid chromatography, and mass spectrometry. The procedure was described in a recent paper (10).

Statistical Analysis

Mean immunoglobulin levels in the various groups were compared by two-tailed Student's t test. Serum indolethylamine-N-methyltransferase levels were correlated with serum levels of the various immunoglobulins by computing the linear regression coefficient. The sum symptom score was also correlated with the serum level of the various immunoglobulins by computing the linear regression coefficient. The serum level of each of the immunoglobulins was correlated with age in the various control and patient groups. Black male patients were compared to white male patients and black female patients to white female patients for their ratings on each of the seven behavioral variables by two-tailed Mann-Whitney U test corrected for ties.

Determination of Serum Immunoglobulins

IgG, IgA, IgM, and IgD were determined independently for each serum by radial immunodiffusion in agar gels (11).

RESULTS AND DISCUSSION

The significant differences between patient groups in mean serum levels of immunoglobulin are presented in table 1 and figure 1.

We found higher mean serum levels of IgA in schizophrenic women than in healthy control women ($p<.05$) and in schizophrenic blacks than in control blacks ($p<.005$). Mean serum IgA levels were also higher in schizophrenic black women than in control black women ($p<.05$) but not in schizophrenic black men as compared with control black men or in schizophrenic white women as compared with control white women. Mean serum IgA levels were higher in schizophrenic blacks than in schizophrenic whites ($p<.025$). The overall data on mean serum IgA levels seem to suggest that both sex (female) and race (black) contribute to the observed difference in mean serum IgA levels between schizophrenic individuals and healthy controls. Even though our observed differences in means are sta-

TABLE 1
Significant Differences Between Groups in Mean Serum Levels of Immunoglobulins

Immunoglobulin	Groups Compared	N*	Serum Level** Mean ± SD		Significance
IgA	Schizophrenic women	10	3.52	0.95	$p<.05$
	Control women	16	2.50	1.16	
IgA	Schizophrenic blacks	11	3.54	1.15	$p<.005$
	Control blacks	14	2.23	0.76	
IgA	Schizophrenic whites	8	2.35	0.85	$p<.025$
	Schizophrenic blacks	11	3.54	1.15	
IgA	Schizophrenic black women	6	3.78	0.80	$p<.05$
	Control black women	7	2.36	1.02	
IgM	Nonschizophrenic patients	7	0.61	0.29	$p<.05$
	Control subjects	31	1.19	0.70	
IgM	Control blacks	14	1.59	0.70	$p<.01$
	Control whites	17	0.86	0.51	
IgM	Control black women	7	1.94	0.80	$p<.02$
	Control white women	9	0.87	0.41	
IgD	Schizophrenic whites	8	21.71	30.24	$p<.05$
	Schizophrenic blacks	10	59.82	33.33	
IgG	Schizophrenic patients with phenothiazines in urine	4	18.06	3.62	$p<.05$
	Schizophrenic patients with no phenothiazines in urine	14	11.13	5.29	

* Data were not available for some subjects.
** Mean levels of IgA, IgM, and IgG are expressed in milligrams of immunoglobulin per milliliter of serum and mean levels of IgD in international units of IgD per milliliter of serum.

tistically significant, we feel that because of the relatively small size of our samples, and in particular the small size of the sex-race subgroups, our observations should be accepted with reservation until they can be replicated in larger samples and in a number of patient and control populations.

One possibility is that the differences in mean serum IgA levels between black and white schizophrenics could be explained by sex composition of the groups. However, this possibility is unlikely since Buckley and Dorsey (12) found that in adults there was no difference in mean serum IgA levels between men and women or between blacks and whites. In our own healthy controls, mean serum IgA levels were not significantly different between men and women or between whites and blacks.

In addition, the difference in mean serum IgA levels between schizophrenic blacks and control blacks could hardly be explained by a difference in sex composition since there was no significant difference in mean serum IgA levels between control black men and women.

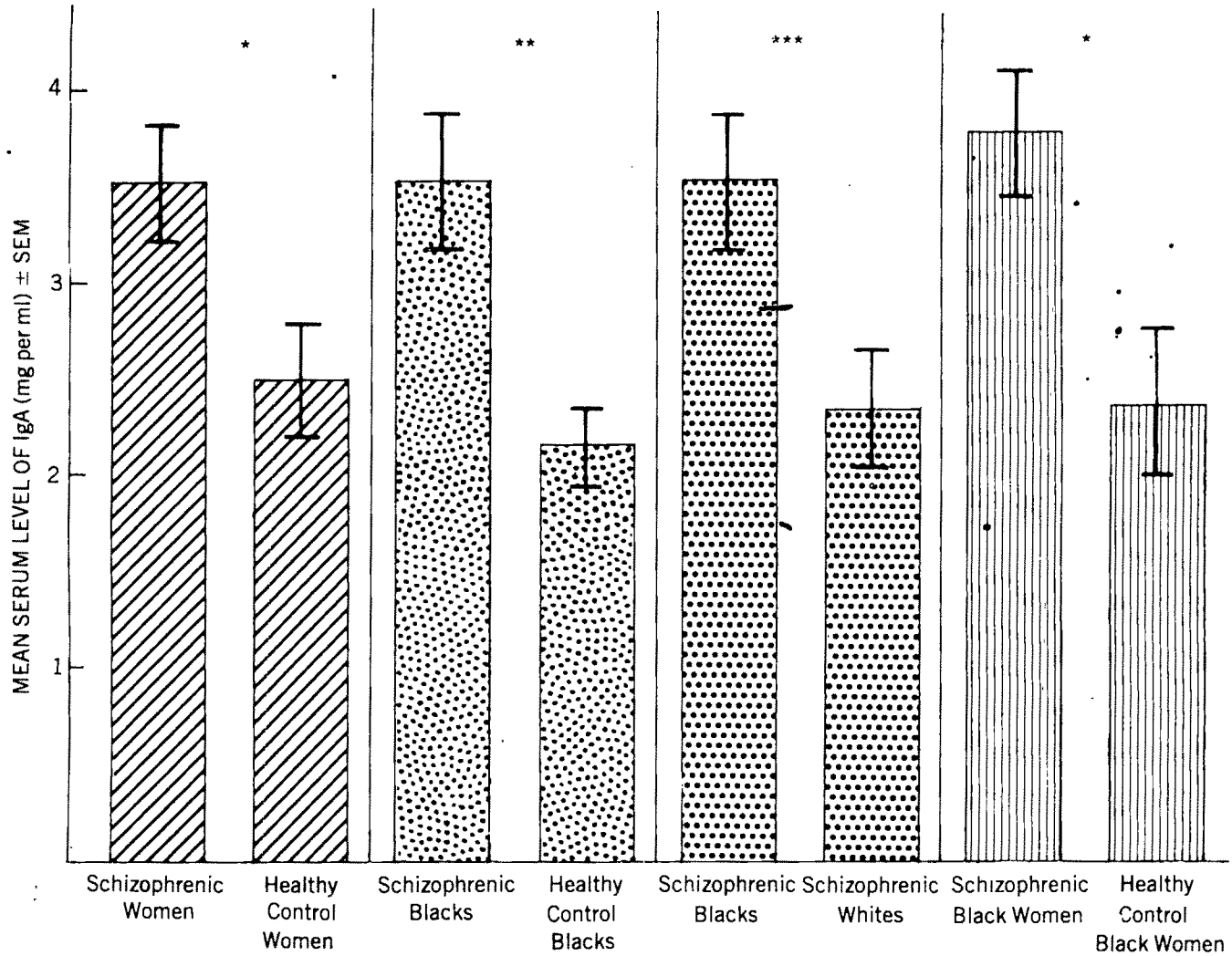
We do not feel that differences in age composition of the various groups could explain the difference among groups in mean serum IgA levels since we did not find any significant correlation between serum IgA levels and age in any of our patient and control groups. Buckley and Dorsey (12) found that changes with age in serum IgA levels in adults are small and not significant.

The observed findings on serum IgA levels are only partly in agreement with the findings of Strahilevitz and Davis (3), who reported significantly higher mean serum IgA levels in schizophrenic patients than in healthy controls or nonschizophrenic patients ($p<.05$, two-tailed Student's t test). These researchers also found that schizophrenic women had significantly higher mean serum IgA levels than control women or nonschizophrenic female patients ($p<.02$ and $p<.05$, respectively). The differences in mean serum IgA levels between schizophrenic men and control men or nonschizophrenic male patients, respectively, were not significant (13).

We found that both mean serum IgA and IgD levels were significantly higher in schizophrenic blacks than in schizophrenic whites ($p<.025$ and $p<.05$, respectively). There were no significant differences in mean serum IgA or IgD levels between black and white control subjects. These observations may be explained by differences in constitutional factors and/or environmental factors between black and white schizophrenics.

Similarly, the significantly higher mean serum IgA levels in schizophrenic women than in control women, in schizophrenic blacks than in control blacks, and in schizophrenic black women than in control black women may be related to both environmental and constitutional or genetic factors. The fact that there were no significant differences in mean serum IgM and IgG lev-

FIGURE 1
Significant Differences Between Groups in Mean Serum Levels of Immunoglobulin A (IgA)



*p<.05.
**p<.005.
***p<.025.

els between black and white schizophrenics suggests that the differences in mean serum IgA and IgD levels cannot be attributed to nonspecific factors such as dehydration and hemoconcentration.

The finding of significantly higher mean serum IgA levels in schizophrenic black women compared with control black women, but not in schizophrenic white women compared with control white women, may be related to the observation that black female patients had a higher rating on severity of hallucinations than white female patients.

Similarly, the higher mean serum IgD in schizophrenic blacks than in schizophrenic whites may be related to either the more severe hallucinations in black female patients, the more severe thought disorder in black male patients, or to both factors.

The increased IgA levels in schizophrenic women, compared with control women, suggest the following two hypotheses: 1) that the increased serum IgA is due to stress, secondary to the illness or concomitantly present at the time of the acute schizophrenic relapse, without being etiologically related to it, or 2) that the increased serum IgA may be etiologically related to schizophrenia. Regarding the possibility that the increased serum IgA may be etiologically related to schizophrenia, the following speculations may be considered. It may be related to the abnormal lymphocytes described in the peripheral blood of schizophrenic adults (14, 15) and schizophrenic children (16) and in the bone marrow of schizophrenic adults (17).

An elevated serum IgA level may reflect an autoimmune process in which antibodies are produced against

a specific brain site, as suggested by Heath and Krupp (18). The antibody described by these researchers is apparently an IgG antibody. It is possible that an IgA autoantibody may also be involved. It should be stressed, however, that the findings of Heath and Krupp could not be confirmed by other researchers, for example Whittingham and associates (19).

Immunoglobulin A is present in relatively large amounts in certain external secretions. At least as far as the parotid gland is concerned, there is evidence that the secretory IgA is locally produced in the gland epithelium (20). It is not entirely impossible that the elevated serum IgA in schizophrenics may be partly produced in the central nervous system (CNS). There is evidence that IgG antibodies are produced in the CNS in subacute sclerosing parencephalitis and in multiple sclerosis (21,22). A secretory IgA antibody was found in the gastric juice of a patient with pernicious anemia. This antibody has been shown to be specific against the gastric intrinsic factor (23). The possibility of local production of IgA antibodies in the CNS with specificity to certain CNS antigenic components is highly speculative but deserves consideration.

The findings of Bock and associates (6) that serum IgA was significantly decreased in "borderline psychotics" is interesting since it may suggest that in relatively compensated psychotics serum IgA may be lower than normal. Unfortunately, these authors did not describe their diagnostic criteria for "borderline psychosis."

We did not find any significant correlation between the serum level of any of the immunoglobulins and the serum level of indolethylamine-N-methyltransferase in any of the groups.

The sum symptom score of behavioral abnormality did not correlate with the serum level of any of the immunoglobulins in either the schizophrenic patients' group or the nonschizophrenic patients' group. Mean serum levels of IgG were significantly higher in schizophrenics whose urine contained phenothiazines, compared with those whose urine did not contain phenothiazines; in addition, in the combined patient sample (N=29), high serum levels of IgG (above median level) were associated with "no hallucinations" or "mild hallucinations" and low serum levels of IgG (at or below median level) with "moderate" or "severe and persistent" hallucinations.

There are two possible explanations for these findings: 1) both observations are due to phenothiazine treatment, i.e., phenothiazines reduce hallucinations and increase serum levels of IgG, or 2) high serum levels of IgG, either drug induced or not drug induced, are etiologically associated with reduction in hallucinations. One speculation is that an IgG antibody may act as a "protective" antibody against hallucinations in psychiatric patients and that both psychotogenic antibodies (IgA?) and protective antibodies (IgG?) may play an etiological role in certain schizophrenic patients similar to the role played by "protective" and "toxic" antibodies in the pathogenesis of experimental allergic encephalomyelitis (24, 25). We feel, however, that both findings should be replicated in another sample before they are accepted as valid.

The observation that nonschizophrenic patients had significantly lower mean serum levels of IgM than controls and that control blacks had significantly higher levels of IgM than control whites can be explained by age and ethnic factors (12, 26).

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Prompt Publication Policy

The *Journal* would like to remind authors who are particularly interested in early publication (whether to establish priority of an idea, reveal innovative results of new research, or for other pressing reasons) of its prompt publication policy. Under this policy, short (maximum of six double-spaced pages) manuscripts will be considered for publication in the Brief Communications section of the first available issue. These manuscripts must still undergo expert scrutiny before being accepted, and two months must be allowed for the printing process. However, the time required for publication of these short articles can be lessened considerably.

Authors who would like to have their manuscripts considered under this policy should indicate this desire, as well as the reasons for it, when they submit their manuscripts.

Do Dreams Have Meaning? An Empirical Inquiry

BY MILTON KRAMER, M.D., ROBERT HLASNY, M.A., GERARD JACOBS, AND THOMAS ROTH, PH.D.

Three judges attempted to sort randomly selected dreams of normal college students and schizophrenic patients according to dreamer, night of occurrence, and sequential order within a night. Sorting was successful at statistically significant levels (which differed for the two groups) for all but the third task. The authors conclude that dreams are, as depth psychologists have assumed, orderly nonrandom events and that they reflect day-to-day changes in the life of an individual. They note that further work is needed to determine whether there is order among dreams of a given night.

THE MAJOR depth psychologists of this century have all attributed great significance to dreams (1). Freud hypothesized that dreaming was a disguised attempt to fulfill an infantile, generally sexual, wish. If the attempt was successful, the sleeping state of the person would be preserved. Adler assumed that dreaming was a method of generating appropriate affect in order to rehearse for the activities of the subsequent day. Jung postulated that dreaming had a regulatory function that attempted to compensate for exaggerated tendencies in the more conscious aspects of the personality. He felt that if appropriately attended to, dreams could reveal to the dreamer some of the universal truths about the psychological nature of man.

Despite their disparate descriptions of dreaming, all theorists who have addressed the psychological significance of dreams make three identical, if unarticulated, assumptions. First, they assume that dreams have meaning, i.e., that dreams are orderly, nonrandom events. Second, they assume that dreams are meaningful—that the content of the dream is overtly or covertly related to the waking, subjective life of the dreamer. Finally, they hold that dreams subserve some important psychological function and contribute to the adaptive capacity of the individual.

It has already been shown at the group level that dreams have meaning and are not random events (2). Psychologically differentiable groups of people have different dream content. Specifically, there are dream content differences between psychopathological and normal groups (trait differences). The dream content of individuals who are normal, schizophrenic, depressed, or have organic brain disease are distinguishable (3–5). Dream content differences have also been shown for males and females and for various age groups (6). Furthermore, dream content differences can also be demonstrated within psychopathological and normal groups as conditions change (state differences). The dreams of depressed patients before and after effective treatment are distinguishable (7), as are those of normal individuals before and after surgery (8).

From the vantage point of the clinician, however, the concern is not the behavior of groups but that of individuals. The clinician wants to know whether the dreams of an individual (normal or ill) are different from those of other individuals and whether these dreams reflect changes in the individual's condition. The clinician, like the dream theorist, wants to know if there are demonstrable trait and state differences at the individual level.

This inquiry is directed toward extending to the level of the individual the assumption that dreams have meaning. If dreams do have meaning (i.e., are orderly) at the individual level, they should be distinguishable among individuals (trait) and within an individual (state), as they have already been shown to be at the group level. More specifically, we should be able to distinguish the dreams of different individuals, the dreams of one individual on different nights, and the position of one dream within a series of dreams in one night.

METHOD

Two dream series were tested. The first series was from a group of 12 male college students, aged 20–25. These subjects slept for 20 consecutive nights in a sleep laboratory and had their dreams collected at the end of each of the first 4 REM periods of the night. The

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second series was from a group of 11 hospitalized male schizophrenic patients, aged 40–55, who were being treated with phenothiazines. These patients slept in the sleep laboratory for 6 nonconsecutive nights, 3 early in their illness and 3 later, after they had improved (9). The schizophrenic patients were awakened for dream collection after 5 minutes of REM sleep for all REM periods of the night.

The dreams of both groups were recorded and appropriately coded for blind sorting tasks. To test the orderliness of dreams at the individual level, 3 sorting tasks were done for each dream series. In the first task, 3 judges were given 2 sets of randomly selected dreams. One set was made up of 75 dreams from 5 of the normal subjects (15 dreams per subject), and the second set was made up of 65 dreams from 5 of the schizophrenic patients (13 dreams per patient). The judges' task was to sort each set of dreams into 5 groups of equal size according to dreamer.

In the second task the 3 judges were given a group of 15 dreams for each of 10 college student subjects and 5 schizophrenic patients and were asked to sort the dreams of each dreamer into 5 nights of 3 dreams each. For 1 patient only 12 dreams were sorted, 3 from each of 4 nights.

In the third task the 3 judges sorted 50 sets of 3 dreams each from the college students and 34 sets of 3 dreams each from the patients. The task was to place each randomly ordered set of 3 dreams into the order in which the dreams actually occurred on a given night. If the 3 dreams selected came from a night with more than 3 dreams, the task was to place the 3 dreams in their order of appearance in relation to one another rather than in their sequential position.

The judges for the 3 tasks were of heterogeneous backgrounds and differed widely in their experiences with dreams. Judge 1 (M.K.) on both series was an experienced psychiatrist with many years of work in the area of clinical and experimental dream research. Judge 2 (G.J.) on the normal subject series was a second-year psychology graduate student, while Judge 2 (T.R.) on the patient series was an experimental psychologist who has had 5 years' experience in sleep and dream research. Judge 3 on both series was a fourth-year undergraduate student in psychology with 2 years' technical experience in sleep and dream research.

Data analysis was performed on all 6 tasks, 3 on normal subjects' data and 3 on patients' data, using chi-square tests. The expected or chance level was determined for each task by taking the mean of 10 random sorts.

RESULTS

Each of the judges was able to distinguish the dreams of individual college students ($p<.001$) and schizophrenic patients ($p<.01$) (see table 1). Clearly, the dreams of different individuals can be distinguished, whether the dreamers are normal or schizophrenic. This suggests that dreams have a meaning at the level of the individual.

TABLE 1
Frequency of Correct and Incorrect Differentiation of Dreams of Five Normal and Five Schizophrenic Subjects According to Dreamer

Item	Correct Judgments	Incorrect Judgments	Chi-Square	Significance
Normal subjects' dreams (N=75)				
Expected frequency*	22	53	—	—
Observed frequency				
Judge 1	53	22	88.057	$p<.001$
Judge 2	59	16	105.494	$p<.001$
Judge 3	59	16	105.494	$p<.001$
Overall	—	—	299.045	$p<.001$
Schizophrenics' dreams (N=65)				
Expected frequency*	16	49	—	—
Observed frequency				
Judge 1	26	39	8.290	$p<.01$
Judge 2	25	40	6.715	$p<.01$
Judge 3	25	40	6.715	$p<.01$
Overall	—	—	21.720	$p<.01$

* Mean of 10 random sortings.

The judges were able to sort the dreams of each of the 5 normal subjects at a level well beyond chance, but were able to do so for only 3 of the 5 schizophrenic patients. Although one can sort dreams from among normal subjects and among patients at a statistically significant level, the task is easier—i.e., the dreams are more distinguishable—among normal subjects than among patients.

In addition, each judge was able to sort correctly the dreams of both normal subjects ($p<.001$) and patients ($p<.001$) according to their occurrence on different nights (see table 2). This striking observation would seem to support the interpretation that dreams reflect day-to-day changes in the individual.

The judges were unable to sort the dreams of 2 of the 10 normal subjects into different nights at even the chance level. However, they were able to sort the dreams of all 5 schizophrenic patients into different nights at above the chance level. Although one can sort dreams from among different nights for individual subjects and patients at a statistically significant level, the task is easier for schizophrenic patients than for normal subjects.

None of the 3 judges was able to order the normal subjects' dreams into their correct position of occurrence within the night. The judges were differentially successful in placing the dreams of the schizophrenic patients into their correct relationship within the night (see table 3). Judge 3 was able to sort the dreams of schizophrenic patients into their correct order at a statistically significant level ($p<.01$) and Judge 1 was able to approximate significance ($.05<p<.10$). The problem in the normal subject population was a failure to correctly identify the dream in the middle position. Judge

TABLE 2
Frequency of Correct and Incorrect Differentiation of Dreams of 10 Normal Subjects and 5 Schizophrenic Patients According to Night Dream Occurred

Item	Correct Judgments	Incorrect Judgments	Chi-Square	Significance
Normal subjects' dreams (N=150)				
Expected frequency*	30	120	—	—
Observed frequency				
Judge 1	54	96	24.000	p<.001
Judge 2	58	92	32.660	p<.001
Judge 3	52	98	20.160	p<.001
Overall	—	—	76.820	p<.001
Schizophrenics' dreams (N=72)				
Expected frequency*	14	58	—	—
Observed frequency				
Judge 1	32	40	28.728	p<.001
Judge 2	24	48	8.866	p<.01
Judge 3	31	41	25.624	p<.001
Overall	—	—	63.218	p<.001

* Mean of 10 random sortings.

TABLE 3
Frequency of Correct and Incorrect Differentiation of Dreams of 10 Normal Subjects and 10 Schizophrenic Patients According to Order of Dreams Within a Night

Item	Correct Judgments	Incorrect Judgments	Chi-Square	Significance
Normal subjects' dreams (N=150)				
Expected frequency*	50	100	—	—
Observed frequency				
Judge 1	52	98	.120	n.s.
Judge 2	59	91	2.430	n.s.
Judge 3	58	92	1.920	n.s.
Overall	—	—	4.470	n.s.
Schizophrenics' dreams (N=102)				
Expected frequency*	34	68	—	—
Observed frequency				
Judge 1	42	60	2.823	.05<p<.10
Judge 2	36	66	.169	n.s.
Judge 3	48	54	8.646	p<.01
Overall	—	—	11.638	p<.01

* Mean of 10 random sortings.

3 attempted a second time to sort the normal subjects' dreams by position within the night but was still unable to do so at a statistically significant level.

The judges were, overall, unable to sort the dreams of a night into their correct position of occurrence. Although the sorting of schizophrenic patients' dreams suggests a positional effect, the most conservative conclusion would be that such an effect was not demonstrated. It seems worthwhile, however, to pursue the positional effect in further studies.

DISCUSSION

This study supports the assumptions of all depth psychologists that dreams are orderly, nonrandom events. Judges can successfully distinguish among the dreams of different people and among the dreams of one person on different nights. This is true for both normal and schizophrenic subjects, although at different levels of statistical significance.

The fact that an individual's dreams are distinguishable from those of another individual suggests that dreams reflect enduring traits of personality. It is probably this trait-related nature of dreaming that allows insights to be drawn about long-range aspects of the subject's psychic life from his dreams.

It could be argued that the ability to distinguish one person's dreams from another's relates not to the distinctiveness of the dreams but to individual differences in verbal style. In our opinion, however, the fact that a person's dreams of one night can be distinguished from those of another night argues against verbal style being the only distinguishing feature. If it were, verbal style would have to account for both inter- and intrasubject differences, even though, for the normal subjects, intrasubject differences were found in dreams only a few nights apart.

The fact that it was easier to sort the dreams of normal subjects than the dreams of schizophrenic patients suggested to us that the normal young male college student population was more diverse than that of the hospitalized male schizophrenic patients. This suggests that schizophrenics are more like each other and provides indirect support for the view of the commonality of the schizophrenic rubric. At least in their dream reports the schizophrenic patients were more similar to each other and therefore more difficult to distinguish. However, the patients' dreams may have been less distinguishable simply because the patients all shared a common and restricting environment—the hospital. An alternative explanation might be that the dreams of individual normal subjects were more homogeneous than those of individual schizophrenic patients. The dreams of the normal subjects were recorded during a 20-day period when there were no major state changes in their lives. The dreams of the schizophrenic patients, however, were recorded over a longer period and represented periods before and after treatment, with a corresponding change in psychopathological state. This change in state may have blurred the differences among schizophrenic patients and made sorting more difficult.

We believe that the reactive or state nature of the dream is reflected in the judges' ability to sort successfully the dreams of one night from those of another for both the normal subjects and the patients. To sort the dreams of the same person by night requires that the dreams of a given night have more in common with each other than with those of another night. Therefore, the state distinction reflected in dreams is not an especially enduring one and is probably measured in terms

of a day or days rather than weeks or months.

The fact that the schizophrenic patients underwent greater change across the dream collection period, which was longer than that for the normal subjects, might also in part explain why the dreams of the schizophrenic patients were more dissimilar on different collection nights than the dreams of the college students. This modest increase in the ability to distinguish among dreams of different nights for a schizophrenic patient would also argue for the reactive nature of a night's dreams—for the dream reflecting the state as well as the trait of the dreamer.

We do not feel that we have demonstrated the sequential interconnection of dreams of a given night, despite the statistical finding that overall we could sort the position of dreams within a given night for schizophrenic patients. Our failure to sort dream position within a night in normal subjects and the fact that our most accurate judge in placing the dreams of schizophrenic patients was unable to do so with the dreams of normal subjects leads us to our negative conclusion. It is possible that our not utilizing only sequential dreams compounded our difficulty in sorting the dreams correctly. Although our present data do not allow us to accept the notion of there being order among the dreams of any given night, we feel that this is a point worth pursuing.

We found it striking that the relative experience or inexperience of the judges in working with dreams did not have any effect on their ability to sort the dreams in any of the three tasks. The effective clinical use of dreams may be enhanced by the clinical experience of the therapist, but the ability to see connections among dreams appears to be unrelated to prior clinical experience. Apparently, the order in dreams is there to be seen for those who choose to look. One need not have an experienced eye.

It is our opinion that these observations not only support the assumption that dreams have meaning but also lend indirect support to the two other assumptions basic to any psychological theory of dreaming—namely, that dreams are meaningful and that dreams are functional. Our finding that the dream reflects the trait and state of the dreamer enhances the likelihood that the dream can be placed into the waking life of the dreamer and achieve meaningfulness. The apparently reactive nature of the dream that was shown by the judges' ability to distinguish one night of dreams from another gives the dream the flexibility needed to participate in the day-to-day psychologically adaptive activities of the dreamer.

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Personality Disorder and Parietal Lobe Dysfunction

BY PAUL C. HORTON, M.D.

An inability to relate transitionally is a major feature of personality disorder. The developmental independence of transitional relatedness from verbal-symbolic growth, its orienting function, and the nature of its visual and tactile components support the conclusion that it is a function of the nondominant parietal lobe. Therefore it can be hypothesized that dysfunction of this area is the cerebral analogue of personality disorder. The fact that unawareness of illness ("anosognosia") in conjunction with grossly intact intellectual function is common to both personality disorder and minor parietal lobe dysfunction further supports this hypothesis.

THE INABILITY to relate transitionally has proven, in my experience, to be the psychopathological cornerstone of personality disorder. In this paper I will first briefly describe the psychological characteristics of transitional relatedness and then consider its possible neurological analogue and the inferences that can be drawn from its absence.

TRANSITIONAL RELATEDNESS

The transitional object has been described as "the infant's first possession, a blanket or toy which he holds and manipulates on going to sleep and in times of distress" (1, p. 93). Winnicott (2) described the transitional object as any of a limitless number of soothing objects and experiences—a blanket, teddy bear, soft or hard toy, an infant's babbling, even a tune. Any idea, concept, or thing can be "transitional" provided that it is experienced in the "third or intermediate area" (2).

For the child the transitional object is "a sedative which always [works]" (2). Busch and associates stated: "This functional value . . . as a soother . . . is something that is agreed upon by all" (3). A child who is too suddenly deprived of his treasured soother will become disconsolate, have difficulty falling asleep, and may even mourn its loss.

The nearly ubiquitous ability to personalize and make an external object such as a blanket or teddy bear internally meaningful is a developmental milestone. In a previous communication (4) my associates and I stated that this ability

> takes its origin, in part, from the time when a child is able to imbue a toy or other concrete object with the life he feels stirring inside of himself. . . . In this way, *that* teddy bear becomes *his* teddy bear. Unique in the world and irreplaceable, it is the psychological area of the personal universe where the external reality of cloth, stuffing and buttons becomes inseparably interwoven with the life of its owner.

Psychological maturity—even the "ultimate stages of a human being's capacity for cultural experience" (4)—results partially from and confers subtlety and complexity to transitional relatedness (2, 5–7).

The Orienting Function of the Transitional Object

An important aspect of transitional relatedness is its orienting function. To be oriented means to be adapted to a particular thing or situation. Psychiatrists and neurologists customarily state that a person is oriented when he is aware of person, place, and time. The neurologist may also use this term to denote other kinds of awareness. He may mean that the patient can distinguish left from right, construct block designs, and copy test figures.

The infant or small child, however, is not oriented in the customary or some of the more specialized ways described above. The sense of past and future is entirely lacking in infancy and only weakly developed at age 3. Similarly, "place" other than home is recognized only after the first year of life. Infants and small children cannot, of course, distinguish left from right or correctly copy designs.

In spite of these characteristics, we do not ordinarily refer to infants and small children as "disoriented." The 6-month-old infant is oriented when he is able to recognize "mother." This is the earliest and most basic interpersonal orientation. The mother *is* the infant's world. As Spitz said: "From the beginning of life it is the mother, the human partner of the child, who mediates every perception, every action, every insight, every knowledge" (8, p. 101).

The mother is normally much more than a familiar face or a mere female parent. She is the child's primary soother. Through her come all good things.

The child is able to leave the mother's bosom when he can find something of her nurturance in the world about him. Without this ability he is disoriented; the

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world is frighteningly foreign. Nature has conferred on the normal child a special capacity for transitional relatedness that permits exploration and eventual separation. The child can conjure up the soothing qualities of mother by means of inanimate objects, concepts, ideas, and other human beings. The transitional object, as the mother surrogate, is the child's compass and convoy to the unfamiliar. Clutching his stuffed animal, reciting his favorite prayer, or contemplating the powers of his latest superhero, he is nearly always "at home."

PERSONALITY DISORDER

The following cases illustrate disorientation and other salient features of personality disorder. Such exemplification is necessary because this diagnosis, even when made by experienced psychiatrists, continues to have low interrater reliability (9).

Case 1. A 29-year-old woman was first seen a few days before the birth of her second child. Her obstetrician was at his "wit's end" because of her chronic complaining. She had already alienated her previous obstetrician and several other physicians with perpetual carping about their failure to relieve her many aches and pains. Her husband was also getting fed up. The circumstances were reminiscent of the patient's early life, when her parents told her, "No matter what you have you're never satisfied." All potentially nurturing figures were resented by the patient and were relegated to caretaker status. Psychological testing verified the absence of psychotic or neurotic conflicts and confirmed a diagnosis of inadequate personality. She had no history of transitional relatedness.

The patient's 9-year-old daughter had, in contrast, both a teddy bear and a "friend blanket." I asked her what ideas she had about why her daughter had such attachments and she had none. She stated:

> You see, my mother made me afraid of everything. I can remember her riding the school bus with me when I didn't want to go to kindergarten. When I was 12 or 13 years old she was always after me about locking the doors at night and didn't want me to stay home alone. I think because of my parents I never had many friends. I didn't like being alone but I hated crowds. Even today I don't like it if the neighbors bring their kids over. I can only take it for about 10 minutes and then they start getting on my nerves. I can't keep up with what is going on when there are a lot of people around. I never felt secure. . . . The difference between me and my daughter is that she can feel secure . . . her teddy bear makes her feel at home. It gives her a sense of routine. She doesn't feel strange when she has it with her.

In this case we see how lost and frightened individuals with personality disorder are from early life. They experience all human beings with equal impersonality. One caretaker is as good or bad as another, and all are resented. The soothing qualities of mother are neither perceived nor internalized. Hence, these persons grow up feeling they are owed something, although they have no idea what it is. Responsibility is externalized ("My mother made me afraid, . . ." "Because of them, . . ." "My doctor didn't . . ."). This basic disorientation, rooted in infancy, causes them to stumble "through the world wrapped in [their] separateness, as though in an insulator, touched rarely and never moved by [their] fellow man" (4).

Case 2. The mother of a 9-year-old boy stated, "We can't get him to go along with what we want." The patient was referred for evaluation after he threatened his 13-year-old brother with a knife. The parents were alarmed by the savageness and seriousness of intent of the attack. They said that he "always seemed to have a mean streak," was "easily upset," and would "have to get even for anything that was done to him." He was "always more clumsy" and "harder to reach" than his siblings. His fourth-grade teacher said, "There is something missing in him that is hard to put a finger on." Unlike his siblings, he had no history of transitional relatedness.

The patient revealed feelings of inadequacy, loneliness, and isolation. The psychologist stated that "parental figures are not seen as nurturing and a source of strength." He frequently portrayed sadistic superhuman creatures from outer space in therapy.

The patient performed relatively poorly on visual-motor and spatial organization tasks. Prior to therapy his scores on the verbal and performance portions of the Wechsler Intelligence Scale for Children were 116 and 75, respectively. After 6 months of therapy designed to increase his ability for transitional relatedness his scores were 112 and 91. The relevance of these results will be discussed later.

Unable to permit psychological soothing or to develop the ability for psychological self-soothing, he had never emotionally perceived "mother." Her essence, i.e., the ability to soothe and nurture, had eluded him. Therefore he could find no mother surrogates. There was no valid basis for transition, and he was lost in the "outer space" of his inner mind.

THE NEUROPSYCHOLOGY OF PERSONALITY DISORDER

The following hypothesis will be explored in this section: 1) An inability or incapacity for transitional relatedness is the psychopathological cornerstone, the necessary (albeit not sufficient) condition of personality disorder (4). 2) The locus of transitional relatedness is the right (nondominant) hemisphere; therefore personality disorder is related to or caused by, in part, a disturbance of the right hemisphere. 3) The fact that unawareness of illness in conjunction with generally intact intellectual functions is observed in both personality disorder and nondominant parietal lobe dysfunction suggests that there is a specific relationship between these syndromes.

Transitional relatedness is usually first manifested during the fourth to twelfth months of life (2). Thus it ordinarily predates all but the sensorimotor state (10, 11) of verbal-symbolic development. Moreover, verbal symbolic maturity can occur, as it does in personality disorder, without the ability for transitional relatedness. Neither of these developmental milestones is,

therefore, a necessary condition for the appearance of the other.

According to the "law of progressive lateralization of functions" (12, 13), developmentally independent and important psychological structures might be expected to be located in opposite hemispheres. This law posits a hemispheral division of labor in which the "left (dominant) hemisphere (in right handers) begins to play an essential role . . . in cerebral organization of all higher forms of cognitive activity connected with speech . . . whereas the right (non-dominant) hemisphere either begins to play a subordinate role . . . or plays no part whatsoever in their course" (12, p. 78). Since verbal-symbolic behavior is a function of the posterior two-thirds of the left hemisphere in 97% of the population (13), it is reasonable to speculate that the right hemisphere is the cerebral correlate or locus of transitional relatedness, which is a nonverbal ability.

However, we may go beyond sheer speculation. The orientational role of the right hemisphere is well established. It is known, for example, that the right hemisphere is essential to a "holistic, gestalt mode" of perception (14). A patient with a disturbance of the nondominant parietal lobe may be unable to orient himself in space, reproduce constructions, or recognize objects. Disturbances of body schema also occur (15).

The orientational function of transitional relatedness bears an anatomical relationship to these orientations. Tactile recognition—a major determinant in the selection of the infantile transitional object (3)—is a function of the right hemisphere. Recognition of the mother's face—a precursor of infantile transitional relatedness—is also a function of the right hemisphere (14). The relatively poor performance on visual, motor, and spatial organization tasks by the 9-year-old personality disordered boy described earlier and observed by me in several other adult and child cases supports this inference.

In addition to disorientation, lack of awareness of illness is common to both personality disorder and dysfunction of the nondominant parietal lobe. As regards personality disorder, Freedman and associates stated that "the affected person does not think of himself as ill or deviant" (16, p. 373). Eaton and Peterson said: "Except when there is external stress, either coincidental or in reaction to the patient's behavior, anxiety is absent. Other subjective complaints are rare; when present, they are usually rationalizations or conscious efforts to excuse failure" (17). Derdeyn said: "The personality disordered person's maladaptive behavior is experienced as a normal, natural part of him, and he does not usually have feelings of doubt or of having made mistakes" (18). The following case illustrates this feature of personality disorder.

Case 3. A 16-year-old boy who had been a severe disciplinary problem from early childhood was referred for psychiatric evaluation by the public school system. He had been physically assaultive toward peers, teachers, police officers, and relatives. School officials had become fearful of setting limits because of his "bad temper." He had few friends and did poorly in school. He acknowledged that it would be very difficult for him to obtain a job without a diploma, but he angrily rejected a truncated school day designed to minimize violent outbursts. Neurological and EEG exams were within normal limits. The diagnosis was explosive personality disorder.

The patient could recall no transitional objects. His mother was also unable to recall soothers or favorite toys used by her son, although she described extensive transitional object usage by his siblings. He showed no insight into his disturbed behavior; for example, he remarked that, "if they [teachers, peers, etc.] give me bad luck, I give it back." He refused treatment, asking incredulously, "What for?"

The lack of awareness of psychological disturbance shown by those with personality disorders is conceptually isomorphic with "anosognosia," a symptom of nondominant parietal lobe dysfunction. The congruence is striking:

> Every agnosic patient, regardless of the modality involved, is incompletely aware of his deficit; hence he neglects and denies it. The neglect, denial and imperception are usually directly proportional to the severity of the defect. Though he may know that something is wrong, he cannot define it, and when he is most severely affected he does not even recognize that he is ill. (19, p. 44)

Apposite to the present thesis is that anosognosia is a *defining* minor parietal lobe sign:

> It is not the gnostic disorders just described which are of the greatest importance . . . but the general *perception by the patient of his own body and his own personality*; accordingly, by far the most important symptom of a lesion of the right hemisphere is the remarkable *absence of perception by the patient of his own defects*, a condition known for many years in clinical practice and to which the name *anosognosia* has been given. (12, p. 167)

Both personality disordered individuals and patients with a parietal lobe deficit are rigidly unable to recognize their illness. In neither case is this ignorance of illness usually amenable to improvement by major tranquilizers or vigorous conventional psychological approaches. Psychological conflicts do not appear to underpin the unawareness.

Compatible with identification of dysfunction of the nondominant parietal lobe as the cerebral analogue of personality disorder is the presence of grossly intact intellectual functions in both conditions. Luria stated that "right handed persons with a lesion of the nondominant right hemisphere exhibit no disturbances of speech, writing, reading and arithmetic . . . and their understanding of logical-grammatical structures, as well as their formal logical operations, remain unimpaired" (12, pp. 163–164). Correlatively, personality disordered persons exhibit normally distributed intelligence (16, 20).

Less specific characteristics of personality disorder

consonant with a parietal lobe analogue are pervasively poor judgment ("deeply ingrained maladaptive patterns of behavior" [21, p. 41]) and concreteness. Personality disordered persons lack active interests, aims, attachments, values, or goals that extend beyond the most immediate concerns of their own lives. They show a cognitive style that is "inevitably dominated by the present" (22) and, as such, is correctly labeled "concrete." Although they may do well at proverb interpretation and similarities, they manifest concreteness in the highest, distinctively human functions such as "the capacity to think creatively, to deal effectively with new and complex problems, and to love and care for others" (23, p. 10). Such concreteness is a well recognized sign of organic brain syndrome.

DISCUSSION

The hypothesized relationship between personality disorder and nondominant parietal dysfunction is preliminary, tentative, and, above all, incomplete. For example, the effects of familial and cultural determinants, pathological physiology, the endocrine milieu, metabolic enzyme systems, possible genetic contributions, and other potentially relevant psychobiological parameters on the personality disordered human being have not yet been explored. In addition, space limitations do not permit a consideration of alternative cerebral loci.

Many questions remain about personality disorder and lack of transitional relatedness. Is personality disorder a function of an inability or incapacity to relate transitionally? If inability is at issue, how can growth of transitional relatedness be stimulated? If incapacity is the source, what compensatory mechanisms can be elicited? Can neurological as well as psychological measures be employed to either stimulate or compensate for lack of transitional relatedness? Do critical periods exist for the acquisition of transitional relatedness, as is the case with language development (24)?

Although previous studies of neurological parameters of "conduct," "character" and "personality" disorder, "psychopathic personality," "vulnerable personality," etc., have not been reviewed in this article, they add little to the present thesis. For example, it is far from clear exactly what is being held to relate to the electrical activity of the brain in numerous studies (25).

One can hope that one consequence of greater understanding of personality disorder will be an enhancement of realistic sympathy and humane regard for its victims. Lacking an important dimension of human experience, these rigidly constricted and isolated human beings, who show chronically poor judgment in matters of love and work, view ordinarily meaningful social life as outsiders. Like my 9-year-old patient, they feel themselves to be creatures from outer space. They hope that they are powerful enough to manage. Although they are held mentally competent and legally responsible (witness the recent death sentence of a 15-year-old Florida boy for the rape-slaying of a 12-year-old girl), they have no valid concept of choice and responsibility. The recognition of a concurrence of several serious psychoneurological deviations from the normal that result in impairment of the capacity for survival and efficient functioning should permit us to consider the possibility that personality disordered individuals are truly ill.

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Psychiatric Effects of Prolonged Asian Captivity: A Two-Year Follow-Up

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The authors have been following a group of 6 prisoners of war and their families since the men were returned from North Viet Nam. They found that most of the men experienced cognitive, social, work, emotional, and family difficulties during the first two years after their return. However, most of these problems were resolved after two years, and there was no evidence of the concentration camp syndrome, homicidal or suicidal behavior, violent physical aggression, impotence, fugue states, psychosomatic disorders, or major psychiatric illnesses in any of the men. On the basis of their findings, the authors make recommendations for future reentry programs.

MORE THAN TWO YEARS have passed since the release and repatriation of 566 Americans held prisoners of war (POWs) in North Viet Nam. Initial reports indicated that the men were in better than expected condition. The concentration camp syndrome seen frequently in prisoners held by the Nazis has not appeared. Much of the research on man's reaction to the stress of captivity (1–15) seems applicable to our released POWs from Viet Nam.

Information released by the Department of Defense in May 1973 (16) indicated that of the 566 returned POWs, only .7% were diagnosed as having a psychotic disorder, 1.9% as being mildly to moderately depressed, and 2.5% as having an adult situational reaction. The relative absence of psychiatric diagnoses in 1973 suggested that reintegration into the social, family, and community framework would be a straightforward process for these men. This paper describes the effects of captivity on the social reintegration of 6 of the 566 POWs.

METHOD

We followed 6 returned POWs (1% of the POW returnee population) and their families for two years. In all cases we had known the families for at least one year before the men's return. Prereturn problems in these families and the relationship of the initial symptoms to the gross stress model of captivity have been reported elsewhere (6, 7). Data were obtained from psychiatric interviews, family contacts, individual and group meetings, and medical and work records. Comparative group data were obtained from the Center of Prisoner of War Studies, San Diego, Calif. The men and their wives and children were seen individually, in small groups, in large groups, and in social situations. We each made independent evaluations of family dynamics and symptoms and then validated these evaluations together.

All of the returned POWs were career military pilots who had been imprisoned for a minimum of five years in the Hanoi area. The 6 men shared certain personality features: they were assertive, competitive, confident, emotionally suited to flying, action-oriented, role-dominant, systems-oriented professional officers who minimized their own dependency needs. All expressed great body awareness and were involved in extensive physical conditioning.

RESULTS

Cognitive Function

All of the men showed cognitive changes that they, their wives, or we perceived as important (see table 1). None of them, however, was grossly incapacitated, and we observed no organic brain syndrome. The general clinical picture in all 6 men was one of adaptive mental slowing, manifested by reduced rates of cognitive processing and a temporary inability to assimilate new material. Confusion was inferred from flooding of awareness and indecisiveness of action. Disorientation to time was inferred from a distorted perception of the passage of time. Diminished visual-motor perception was inferred from difficulty with driving a car. Changes in cognitive function were more apparent and disconcerting to the POWs' families than to the men themselves.

Depressive Symptoms

The depressive symptoms observed in 3 of the men were reactive in type and ranged from mild to moderate in severity (see table 1). In no case did a picture of endogenous or agitated depression develop. No suicidal ideation was reported.

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TABLE 1
Problems of 6 Returned POWs Perceived as Important by the POWs, Their Wives, and/or Their Physicians

Item	Number of POWs, by Person Who Perceived Symptom as Important			
	POW	Wife	POW and Wife	Physician
Symptoms of cognitive dysfunction				
Confusion (N=4)	1	2	2	2
Disorientation to time (N=4)	1	2	1	1
Diminished visual-motor perception (N=5)	0	4	1	3
Diminished memory function (N=5)	2	1	2	4
Diminished concentration span (N=4)	2	1	1	3
Depressive symptoms				
Insomnia (N=5)	0	1	4	5
Disturbance of appetite (N=2)	0	2	0	2
Diminished sexual function (N=0)	—	—	—	—
Suicidal ideation (N=0)	—	—	—	—
Clear psychophysiological reactions (N=0)	—	—	—	—
Substantial physical disability (N=1)	0	0	1	1
Identification with the aggressor (N=2)	0	0	0	2
Intermittently depressed mood (N=3)	1	0	2	3
Cyclical thinking (N=3)	1	0	2	3
Episodic tearfulness (N=3)	1	0	2	3
Feelings of inadequacy (N=3)	1	0	2	3
Excessive fatigue (N=3)	1	0	2	3
Emotional symptoms				
Marked mood shifts (N=2)	0	2	0	2
Paranoid ideation (N=1)	0	1	0	1
Hoarding behavior (N=1)	0	1	0	1
Aggressivity (N=2)	0	2	0	2
Depression (N=3)	0	1	2	3
Fatigue (N=2)	1	1	0	0
Guilt (N=4)	4	0	0	4
Phobias (N=0)	—	—	—	—
Defensive ritual (N=1)	0	0	0	1
Anger aroused by sight of certain Orientals (N=1)	0	1	0	1
Episodes of anxiety (N=3)	1	1	1	3
Fear of crowds (N=4)	2	0	2	4
Flashbacks of camp experiences (N=3)	3	0	0	3
Intrusions into awareness (N=3)	3	0	0	3
Social functioning				
Deterioration of social habits (N=2)	0	2	0	2
Verbally aggressive; inappropriate social behavior (N=1)	0	1	0	1
Family relationships				
Takes dominant role (N=5)	0	0	5	0
Takes passive role (N=1)	0	1	0	0
Jealous of wife (N=2)	0	2	0	2
Suspicious of wife (N=2)	0	2	0	2
Excessively controlling of wife (N=1)	0	1	0	1
Has conflicts with children (N=2)	0	2	0	2
Lacks language skills (N=1)	1	0	0	1
Lacks interpersonal skills (N=4)	2	2	0	4
Work adjustment				
Fear of inability to function at first job after return (N=3)	1	0	2	0
Indecisiveness (N=3)	2	1	0	0
Anger directed at military service (N=1)	1	0	0	0

The mood shifts of 2 of the men were bipolar and somewhat unusual: one mood was characterized by purposeful "doing" activity coupled with enthusiasm, planning for the future, increased participation in the family, and emotional closeness with family members; the other mood was characterized by withdrawal from the family, dissociation from group activity, a pessimistic attitude toward the future, and increased hostile and accusatory behavior directed toward family members. The men who experienced these symptoms could move from one mood to the other in a matter of minutes. The swings were triggered by what the men perceived as rejection by their wives, who responded to the swings initially with caring, then with anger, and finally with emotional withdrawal. As the women increased their emotional distance, the children also withdrew from their fathers and sided with their mothers.

The insomnia that occurred in 5 of the 6 POWs shortly after their return tended to abate during their first month home. One man experienced sleep-disrupting nightmares clearly related to his captivity experience, and 2 others experienced non-sleep-disrupting catastrophic dreams centering on themes of punishment and captivity.

Depressive symptoms abated within the first year. Three of the men continued to have nightmares after being home for two years. Four men expressed guilt related to having been separated from their families and concerning thoughts or reactions they had while in captivity. They did not tell their families about this guilt and discussed it openly with us only after a relationship of trust had developed. The wives of these men seemed totally unaware of their husbands' feelings of guilt.

Substantial anxiety was present in 3 of the POWs and seemed related to the guilt they expressed. The episodes of overt anxiety had subsided nine months after their return. Although no phobias per se were present, 4 men were judged to have a fear of crowds and 1 man developed the defensive ritual of formally pledging allegiance to a small American flag every day on arising and retiring. One of the men reported the sudden emergence of anger on encountering Orientals whose facial features or mannerisms seemed similar to those of his captors. He never directly expressed this anger and therefore no confrontations resulted. Paranoid ideation was seen in 1 individual, but this had been a personality trait before this man's captivity experience. One man evidenced marked and inappropriate hoarding behavior during the first six months after his return. The aggressivity noted in 2 of the POWs was not judged inappropriate and never entailed substantial physical violence.

Three of the men reported flashbacks of camp experiences as well as intrusive thinking similar to that described by Horowitz and Becker (9, 10). The flashbacks were episodes during which the men felt that they were physically still in captivity in North Viet Nam. These were of short duration and were followed by cognitive awareness of the misperception. The intrusive thinking was characterized by the sudden projection into consciousness of events that were recognized as having occurred in the past.

Emotional Symptoms

We believe that the emotional symptoms of these men (see table 1) were more affectively charged and anxiety producing for the couple than the cognitive symptoms and were therefore handled by mutual avoidance. Emotional symptoms were recognized and considered important by both husband and wife less often than cognitive symptoms. However, recognition of these symptoms by one or the other spouse was frequent. The fear that such symptoms represented mental illness was expressed by either the husband or the wife in 5 of the 6 families. The husbands tended to be more concerned about intrapsychic processes, while their wives expressed more concern about symptoms affecting interpersonal behavior. The couple could easily relate cognitive symptoms to captivity, but they were unable to view emotional symptoms from the same perspective. The wives felt that cognitive function would return in time, but they clearly desired assistance in dealing with emotional disturbances, which they perceived as more devastating.

Social Functioning

Two of the men exhibited marked disregard for conventional social customs (see table 1). They ate very fast, scraped food from their plates and those of other family members, walked about the house in their underclothing, left the bathroom door open, etc. They did not initially perceive this behavior as unusual. At first their wives said nothing about this behavior, but after two to three weeks they began to confront the men about it. The behavior abated within six months. Four of the men had difficulty understanding the affective content of language and in processing its nonverbal component. This symptom persisted for six to nine months after their return. Disordered social functioning was viewed as important by the wives more often than by the POWs and was not an area of mutual discussion.

Family Relationships

Readjustment difficulties seemed most manifest in family relationships (see table 1). Five of the 6 returnees resumed their dominant roles after a short period of dependency. For about two to three months they relied on their wives to reorient them to the changes that had occurred in the family. They then suddenly reasserted their control over the family. Women who had been handling finances, making decisions about the children, and purchasing homes were expected to return these "executive functions" to their husbands. Three of the women expressed resentment at their husbands' taking control of the children. One stated that it was "as if an outsider had come in and begun ordering them about." The men tended to assume control of the male children but often left the female children to their wives.

Three of the 6 women set a definite deadline of less than a year for improvement of the family difficulties. These women saw divorce as a solution to interpersonal difficulties if this deadline was not met. The time limits were clearly communicated to the men, but the changes needed to fulfill the women's expectations of improvement were not clearly communicated. Only 2 of the 6 couples viewed their marital relationship as satisfactory at the end of the first year after the POWs' return. By the end of the second year, 4 marriages were stable, 1 had terminated in divorce, and 1 was still in crisis. The women attached far more importance to the family difficulties than did the men, who were often unable to perceive them at all.

The women ranked their problems in the following descending order of severity: 1) emotional isolation

from their husbands, 2) inability to feel important to their husbands, 3) the husband's emotional "deafness" to the wife, 4) difficulty in sharing control of the children, 5) role reversal from their previous pattern, 6) social isolation, and 7) fear of emotional breakdown in their husbands, their children, or themselves. These issues are reflected in the divorce rate of 26.9% reported for the whole POW group two years after return.

Work Adjustment

Three of the men expressed apprehension about not being able to perform well at their first postreturn jobs (see table 1). The strangeness of a new task, lack of previous experience with the duties, difficulty with memory and concentration, and the fear of failure focused on the issue of job performance. All of the men spent long hours "studying" their new jobs and continually assessing their performances. Four men were unsure whether they would be able to satisfactorily return to work, and 2 felt that their indecisiveness would preclude satisfactory adjustment. The men were much more concerned with this aspect of their lives than were their wives. Work represented the first external assessment of their functional capacity and thus was equated with their self-worth. The difficulties with job performance diminished during the first six to nine months. All of the men actually functioned quite well on their jobs from the outset.

CONCLUSIONS

Our findings do not support a low incidence of psychiatric morbidity for POWs from Viet Nam. Most of the 6 men we studied had some social, work, emotional, and family difficulties. Each area of difficulty seemed specific and followed its own course of onset, impact, and resolution.

Cognitive difficulties were most pronounced during the first three months after return, were resolved without specific intervention, and were easily dealt with by the families. Social problems were most pronounced from the third through the sixth month, were not considered important by the men, but were matters of critical concern for the women. The return of structured family roles was contingent upon resolution of these problems.

Self-imposed and overdetermined standards of work performance represented an important stress for the men from the third through the ninth month after return. After this they were able to function like their peers. The third through the ninth month was also the time when the men felt more uncomfortable in non-POW, nonmilitary social groups.

Emotional factors were present predominantly from the third month through the end of the first year after return and resolved gradually after that. Episodic sleep disturbances were still present in 2 men after two years. Family difficulties tended to resolve during the second year after return.

A temporal sequence of reintegration appeared in all 6 of these families. Reparative work and social functioning could not begin until cognitive clearing had occurred. Emotional factors could not be resolved until there was a stable social and professional role definition. Family problems could not be resolved until adequate time had passed for the wife to feel comfortable with her husband's emotional state.

At the end of two years we saw no evidence of the concentration camp syndrome, homicidal or suicidal behavior, violent physical aggression, impotence, fugue states, psychosomatic disorders, or major psychiatric illness in the 6 men studied. They are currently functioning well at work, have reintegrated themselves socially, and have resolved most of their family problems.

RECOMMENDATIONS

A five-year follow-up of these men may reveal additional time-determined behavior patterns. It was initially difficult to evaluate these men thoroughly and to intervene psychotherapeutically because of the suspicion, distorted self-concepts, lack of trust, and guilt that they harbored. We found that having made contact with their wives provided the best means of reaching these men and helping their families. None of the men would have "submitted to psychiatric interrogation" if their wives had not shown a sense of trust in us. In any future reentry program for POWs, contact with the prisoners' wives should be actively established before the men return.

Psychiatric symptoms in our 6 returning POWs were not readily apparent to casual observation and were not initially reported by them. Many of the men actively tried to conceal painful reactions from the psychiatric team who initially saw them. Although their symptoms persisted, the men became amenable to treatment only because of the development of family problems.

Clarification of their role and self-image, passive-aggressive anger, fear of dependency, inability to trust, and guilt were important therapeutic issues for these men. They stated that direct therapist involvement in work situations and the resolution of questions about their job performances were useful.

Role reversal, inability to share control over the children, feelings of uselessness and inadequacy, social isolation, and fear of emotional breakdown were important therapeutic issues for the wives.

We believe that the following assumptions and programs would be useful in the creation of any future reentry programs:

1. Psychiatric symptoms will be present in most of the returning POWs.
2. Psychiatric symptoms are directly related to the gross stress of captivity.
3. Psychiatric symptoms are best viewed as normal reactions to abnormal situations.

4. Returning POWs will have difficulty in seeking psychiatric help.

5. Marital and family difficulties are likely to occur after the POWs return. They represent the best opportunity to engage POWs in treatment.

6. Severe intrapsychic distress may not be apparent, but it can be readily inferred from behavioral patterns.

7. Establishing a close therapeutic alliance with their wives and children before the POWs return greatly facilitates the families' using helping agencies after the return.

8. Homecoming constitutes an important additional stress for POWs and should be handled slowly, if possible.

9. Reentry group workshops should be held before family reunion. They should deal with the sharing of prison experiences, descriptions of panic reactions, and the clear acceptance of captivity behavior by authority figures.

10. POWs should be briefed before reentry on the current status of their families and on any general changes that have occurred at home.

11. Information that can diminish cultural shock should be imparted slowly to the POWs before their return.

12. Reentry should not be made more stressful by the POWs' making massive public commitments immediately.

13. The POWs should be oriented to their new jobs; there should be a nonthreatening liaison person on the job to whom they can turn for information.

14. Central liaison figures to coordinate medical, psychiatric, and social care for the POW/MIA family should be appointed at military hospitals. These individuals should have clearly defined credibility by being formally allied with a central POW center and should be interested in this kind of position.

15. All psychiatric records of returning POWs should be strictly confidential. They should not be a part of routine health records.

16. Careful consideration of the consequences on the whole group of POWs should be given when court martial procedures are initiated against a POW.

17. Physical rehabilitation and medical and dental treatment programs should be well under way before family reunion.

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Management of Interpersonal Issues in Systematic Desensitization

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The authors use the management of typical clinical problems that arise during systematic desensitization as a model for the analysis and solution of problems associated with behavior therapy techniques. Three main problem areas are considered: initiation of the technique, therapist and patient difficulties, and therapeutic decision making. The discussion is designed primarily to help therapists with varied backgrounds to deal with clinical issues that arise in the application of behavior therapy techniques such as systematic desensitization.

IN THE COURSE of teaching therapies based on learning theory, we have noted a paucity of information on the management of interpersonal issues that arise during the practice of such behavior therapy techniques. In the past, some behaviorists denied that interpersonal issues such as resistance and transference occur in behavioral work and considered these constructs a "popular alibi" (1) used to justify therapeutic failures. Many behaviorists now acknowledge that these issues play a critical role in behavior therapy (2, 3), and several have begun to describe these phenomena in learning theory terms (4–6). As part of this broadening perspective, there is increased interest in integrating learning theory and psychoanalytic principles (7).

Much of the behavioral literature, however, ignores interpersonal issues, leading to a glib assumption of efficacy of these techniques. This induces some therapists to reflexly reject therapeutic claims and others to try a technique like systematic desensitization (SD) in the naive hope of quick, mechanical cures. The latter approach is doomed, since outcome, even with the simplest behavioral techniques, depends on complex interpersonal variables (8–10).

The purpose of this discussion is to place traditional systematic desensitization and its attendant problems in a framework of social learning theory that will be useful to therapists with varied backgrounds who wish to use SD in their clinical work. We will review problems that arise in three major areas: initiation of SD, problems of therapists and patients that interfere with SD, and therapeutic decision making. Some of these principles can be extrapolated to other behavioral techniques (e.g., operant ward management and flooding), but we will confine our discussion to systematic desensitization. Although we have chosen to discuss traditional SD as described by Wolpe and Lazarus (1), we recognize that recent research has suggested that in vivo exposure, without relaxation or hierarchies, may be sufficient for successful therapeutic outcome in desensitization (11).

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INITIATION OF SYSTEMATIC DESENSITIZATION

There are a number of issues that can lead to clinical management problems if they are not dealt with as they arise in the early stages of SD.

First, the therapist must have a sound technical knowledge of SD and its major components—relaxation training, hierarchy formation, and pairing hierarchy images with relaxation (12).

Second, the therapist should be aware that unrealistic positive or negative expectancies held by the therapist, the patient, or both, can interfere with SD (13). Unwarranted therapist optimism sometimes results when an inexperienced therapist naively accepts poorly documented claims of facile "cures." Such optimism can also result from cultish allegiance to the behavioral school. Attitudes of this nature are inevitably transmitted to the patient, who may have his own store of distorted positive expectancies based on conditioned dependency and rescue fantasies. This unrealistic optimism on the part of therapist and patient easily changes to reactive negative expectancy (with possible disruption of the therapeutic alliance) when the usual treatment problems occur. Unrealistic negative expectancies may also occur when the therapist, discouraged about the patient's prognosis or progress in traditional treatment, fails to evaluate the patient specifically as a candidate for SD. In this situation SD can be seen as a desperate last resort rather than a treatment of choice.

A third area for examination is the patient's attitude toward systematic desensitization. The therapist should be alert to the possibility that the patient will consider SD a "second class" treatment designed to suppress symptoms rather than to "cure" them. This is especially true when SD is introduced into insight-oriented therapy that the patient has experienced as beneficial. Patients may attempt to sabotage the SD in or-

der to return to the therapy that is more immediately reinforcing. In these circumstances, it is often useful to continue the (usual) treatment modality in combination with the SD, since this often enhances the power of both approaches. A contraindication for combining treatments is the therapist's judgment that interaction with the patient around issues related to SD will undermine his ability to serve in his more traditional therapeutic role (e.g., by disrupting the emergence or resolution of transference). For example, a therapist might be less able to effectively interpret a paranoid patient's fear of being controlled if the therapy included a traditional, highly directive SD. In many circumstances, however, effective desensitization may outweigh the risks related to combining therapies. (We will discuss this issue further.)

Treatments can, of course, be combined by using two different therapists. This is a viable alternative when the two therapists can work together with mutual respect. Close collaboration is necessary to avoid placing the patient in the damaging position of having two therapists with mutually exclusive explanations of the problem and its resolution.

A fourth area that must be dealt with at the outset of SD is the therapist's comfort in his (new) role. Therapists who are inexperienced in behavioral techniques may feel foolish and uncomfortable as they begin doing something that seems strange, mechanical, and of unproven worth to them personally. Therapists may deal with this discomfort by gradually slipping back into their familiar therapeutic techniques. When this is a persistent problem, we suggest that a designated time slot be allocated to systematic desensitization and that this time be used exclusively for SD or for problems directly related to SD. Other treatment techniques can be carried out in another time slot or can be made contingent on the completion of the behavioral work (i.e., a contingency contract).

THERAPIST AND PATIENT PROBLEMS THAT INTERFERE WITH SYSTEMATIC DESENSITIZATION

The second major area around which clinical management problems center is related to certain characteristics of therapist and patient.

Therapist-Related Problems

Neophyte therapists may "play the behaviorist" and overemphasize a peripheral aspect of behavioral techniques in a way that distorts and obscures the treatment. We have seen sensitive clinicians become brusque and coldly demanding as they assume their fantasied role of a behaviorist. This tendency may result partly from the emphasis on technique at the expense of subtler interpersonal issues in the behavior therapy literature. The neophyte behavior therapist may also be highly invested in learning a new technique and, as a result, may consciously dispense with the "old" (i.e., knowledge of the commonsense principles of psychotherapy) in order to concentrate on learning the new.

Systematic desensitization requires that the therapist be active, directive, and quite specific in his expectations of the patient. Some therapists have difficulty making these demands because of prior training, experience, or personal characteristics. In some cases the therapist can become more comfortable about making these demands if they are more fully understood and begin to seem as sensible as techniques like asking the patient to lie on a couch or to free associate. Since the demands are numerous and explicit in SD, difficulties surface early and present the therapist with a series of clinical decisions such as whether to confront the patient, lessen or switch the demand, or discontinue SD. Clinicians must handle these difficulties without creating unnecessary power struggles.

Another factor is the therapist's personality—some clinicians have much difficulty assuming a directive stance. When this is the major block to pursuing SD, self-appraisal on the part of the therapist may be necessary.

Patient-Related Problems

In order to conduct systematic desensitization with outpatients, the patient must provide accurate self-reports. A number of characteristics can interfere with accurate reporting. Some individuals have little interest in reducing symptoms but get strong reinforcement from the appearance of losing them or of being actively engaged in treatment (e.g., an exhibitionist under court-ordered treatment).

Difficulty with accurate self-reports may also arise when a patient fears criticism or failure, which he may see as leading to abandonment or other aversive consequences. In these circumstances, it is important to make it clear that the therapeutic contract is to help the patient with his problems and that no one technique is necessarily crucial to this function.

In SD, the patient must cooperate with a structured, directive regime. This may evoke fearful distortions around issues of control and dominance in a range of personality types, from the mildly rebellious to the extremely suspicious and paranoid. With some patients, pointing out their fear of being controlled is sufficient to elicit cooperation. If this fails, there are other options. The therapist may need to wait until a more trusting therapeutic alliance is established; unfortunately, this can lead to almost endless delays if the patient is very suspicious. An alternative that may make sense, depending on the total clinical picture, is the use of self-administered systematic desensitization (14), in which the patient retains "control" of treatment by carrying out the bulk of the therapeutic work at home, under his/her own supervision and at his/her own pace.

SD requires that the patient take responsibility for practicing certain behaviors that may be inconvenient and/or uncomfortable (e.g., confronting frightening situations in vivo) as the SD progresses. Paradoxically,

some patients request behavior therapy because they hope to magically avoid the responsibilities and discomforts necessary for behavioral change. Clarification and reduction of these expectations is usually important, since the patient who expects a magical cure often will not participate in assignments needed to ensure real behavioral change.

As with every other kind of therapeutic work, the patient must enter SD with some minimum expectation of success. Thus patients who feel that anything they do is doomed to failure will have difficulties with SD. When expectation of success is lacking because of depression or a history of failures, it is sometimes helpful to establish an initial positive experience (e.g., easy, graded, in vivo assignments) before attempting SD.

Perhaps the most difficult patient-related problem is that of the person who receives more reinforcement from retaining his symptom than anticipating its removal. This is a complex area which will be dealt with in our discussion of how systematic desensitization fits into the overall therapeutic goal and how this relationship should affect management of the therapy.

THERAPEUTIC DECISION MAKING

Often, problems encountered in treating a patient with SD are reflections of other treatment problems that the therapist thinks are worthy of pursuing. For example, a patient may be unable to relax in the office because he is paranoid and afraid of being controlled by the therapist. Although the SD is clinically important (e.g., treating a driving phobia that is interfering with the patient's job), the patient's suspiciousness may be even more serious and may distort his functioning in all life areas. One of the most important factors in deciding how to manage problems arising in SD is how the specific technique and its goal fit into the overall treatment objectives for the patient. There are three basic possibilities: 1) the total treatment goal is the resolution of the problem being treated by SD, 2) the therapist and patient agree on treatment goals that extend beyond the specific goal of SD, or 3) the therapist and patient agree that the problem being treated by SD needs therapeutic attention, but there is disagreement about the need for further treatment, with the patient usually denying that he has anything more than a focal problem.

In conditions 2 and 3 listed above, the management of therapeutic issues is complex because there are multiple treatment goals, and the priority of any goal may shift as therapy progresses. When other difficulties surface during the course of SD, it is sometimes possible to treat the original SD goal and the new problem simultaneously. Often, however, the therapist must decide whether to push on with SD or to treat some new or accentuated problem. We will present guidelines that should help therapists reach appropriate conclusions.

When and How To Pursue SD

When the goal of SD is the total therapeutic objective (i.e., condition 1 above), it is clear that the therapist should attempt to solve problems encountered in the SD in the most expedient manner possible. For example, if the patient is unable to relax in the office, this difficulty should be explored when it appears likely that discussion will lead to a rapid resolution of the problem. If such exploration seems unproductive, the therapist can employ one of several options based on his understanding of the therapist-patient-problem constellation. For example, a methohexital-aided SD (15) might be used when the patient has a strong—even magical—belief in the efficacy of medical treatment. On the other hand, the therapist might opt for self-administered SD with a patient who fears giving up control in therapy.

It is important to pursue SD when there is some urgency in relieving the patient of the target symptom. This is the case when the symptom will become much more difficult to treat in the future, i.e., when a symptom is generalizing (traumatic phobia becoming agoraphobia), being increasingly reinforced (by the acquisition of a phobic partner), or has possible severely debilitating effects (a man with a flying phobia who is about to lose a very suitable job because of his inability to travel).

SD should also be pursued when it appears that its success will place the patient in a better position to confront his other difficulties. An example would be an individual with an animal phobia that constricts his/her world and obscures serious interpersonal problems. When a phobia is masking other difficulties, SD frequently goes smoothly until treatment nears completion, at which time the patient may become increasingly apprehensive. This "end-stage anxiety" has several sources. The patient begins to enter in vivo situations that were previously avoided, and he/she also anticipates new anxiety-provoking situations. The patient's life may have centered around the symptomatic problem; as the symptom subsides, the patient may feel there is a void in his/her life and there is nothing to fill the "vacuum" created by successful treatment. Continuing with SD in spite of such anticipated difficulties may be a first step in teaching the patient to cope with his/her problems in manageable segments.

The last relative indication for pursuing SD occurs when it constitutes an important means of modeling and metacommunication for the patient. This may be particularly valuable when the patient has a chronic tendency to pursue problems briefly, dropping them before they are solved. In this situation therapeutic goal-directedness conveys the sense that the therapist has a clear understanding of therapeutic priorities and that the patient's transient fluctuations in attitude are not cause for redesigning therapy. The therapist thus models more appropriate problem-solving methods for the patient.

When and How To Defer SD

Systematic desensitization should be deferred when significant problems arise that urgently need treatment. The mechanisms by which this occurs are similar to those cited in the earlier discussion of pursuing SD (i.e., generalization, increased reinforcement, or altered consequences of the other problem).

An alternative problem that is uniquely accessible to therapy should often be pursued. This occurs, for example, when a patient being desensitized to a focal phobic difficulty suddenly becomes aware of his lonely, restricted existence, and the therapist feels the patient's usual denial will obscure his/her feelings of isolation if the issue is dealt with later.

Therapeutic objectives should be changed when a patient begins treatment with a token problem but begins to feel comfortable enough, as the therapeutic alliance is strengthened, to reveal more important difficulties. The therapist must then determine whether the token problem is real but minor (requiring later treatment) or was exaggerated as an entree into therapy.

Systematic desensitization usually must be abandoned when it appears that it will not succeed until the disruptive problem is resolved. Some patients get more reinforcement from defeating or frustrating the therapist than from successful treatment. In these cases it is usually important to examine the therapeutic relationship and the patient's feelings about the therapist rather than attempting to resolve the problem by modifying the SD or by introducing a new technique. Even if the patient cannot engage in such introspection, the therapist may help the patient realize that he is actively creating his therapeutic failures.

SD may fail when there is a great deal of reinforcement for the symptom. For example, when the patient has a phobic partner, SD is most useful when the partner (or family) is given supplemental counseling directed toward reducing the interpersonal reinforcement of the symptom (16, 17).

Even when a decision concerning the pursuit or abandonment of segments of SD is made, there is the further question of how much of this reasoning should be shared with the patient (a problem that arises in all therapies). For example, when control of some aspects of treatment is given over to a paranoid patient who distorts collaboration into dominance or submission, one can present the change to self-administered SD to the patient as an efficient way of proceeding, or one can tell the patient that closer collaboration would be desirable but that it appears difficult at this time. Again, the therapeutic decision of whether to make such a statement is in part a function of the relationship between SD and the overall treatment plan.

CONCLUSIONS

Systematic desensitization takes place within the larger framework of a therapeutic alliance, in which careful attention to interpersonal factors is crucial. We have tried to delineate pitfalls for the therapist in incorporating SD into this larger framework. Systematic desensitization, like any other therapeutic intervention, will be ineffective if interpersonal issues are oversimplified or major issues in a patient's life are ignored.

In this paper we have outlined guidelines that may help therapists make sound decisions as choice points occur during systematic desensitization. In these guidelines, the anticipated gains and losses at each decision point are not based on hard data but on clinical judgments, such as when an individual is uniquely ready to face a particular problem or whether a patient's difficulty precludes a successful course of classical desensitization. This framework, in modified form, may prove useful in the application of other behavioral techniques. Our analysis has also generated testable hypotheses (i.e., the relative success of self-administered SD with paranoid personalities) in the crucial area of the interaction of personality characteristics with the application and outcome of specific techniques.

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Brief Versus Standard Hospitalization: The Families

BY MARVIN I. HERZ, M.D., JEAN ENDICOTT, PH.D., AND ROBERT L. SPITZER, M.D.

A total of 175 newly admitted inpatients who lived with families were randomly assigned to three treatment groups: standard inpatient care (discharge at the therapist's discretion), brief hospitalization (one week or less) with transitional day care available, and brief hospitalization without day care. Outpatient aftercare was offered to all patients. There was no major differential family burden as a function of length of hospitalization. Generally, brief hospitalization had several positive effects on family functioning, primarily earlier resumption of occupational roles and less financial burden, with few significant deleterious effects.

IN RECENT YEARS there has been a trend toward early discharge of hospitalized patients in order to avoid the potentially deleterious effects of prolonged hospitalization. While the evidence indicates that brief hospitalization is beneficial for most patients (1, 2), the effects on their families are less clear. Several studies (3–5) have shown that families bear some of the burden when an attempt is made to maintain patients in the community rather than in the hospital. To our knowledge there are no controlled studies comparing the effects on families of brief versus a longer term hospitalization.

This paper, the second report of the results of a controlled study of brief hospitalization, focuses on the initial results concerning the effect on the patients' families and, in addition, on the families' perception of the patients' condition. The first report (1) described the initial results regarding the outcome for the patients as evaluated by such indices as days in the community, rehospitalization rate, and measures of psychopathology and role functioning as evaluated by therapists and research interviewers. Briefly, the average length of inpatient stay until "first significant release" (1 week in the community) was 11 days for the two groups receiving brief therapy and 60 days for the group receiving standard therapy. There were no statistically significant differences in rehospitalization rates for the patients at risk. All three groups made substantial but equal improvement on all measures of psychopathology. However, at 3 and 12 weeks the standard group showed the most impairment in role functioning.

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METHOD

A total of 175 newly admitted inpatients who had families were randomly assigned to the following three treatment groups:

1. Standard-out group (N=63): standard inpatient care with discharge at the therapist's discretion.
2. Brief-day group (N=61): brief hospitalization (generally less than one week) followed by transitional day care if appropriate.
3. Brief-out group (N=51): brief hospitalization with discharge to the community.

The same therapeutic team followed the patient through all treatment modalities, and all patients were offered outpatient therapy.

The study was conducted on the Washington Heights Community Service of the New York State Psychiatric Institute. The service is responsible for a catchment area with a population of 90,000 in an ethnically diverse lower-income area of upper Manhattan. The criteria for inclusion in the study and the demographic characteristics of the patients were presented in detail in our first report (1). Essentially, the primary diagnosis had to be functional illness other than alcoholism, drug abuse, or antisocial personality. The most common diagnosis was schizophrenia (63%); approximately one-third of the subjects were black; slightly over half were in social classes IV and V (6); approximately half had had at least one previous psychiatric admission; slightly less than half were currently married; there were equal numbers of men and women; and over half of the patients were under the age of 35. The only statistically significant differences among the three groups of relevance to prognosis were

fewer married patients in the brief-out group than in either of the other groups and more men in the brief-out group than in the brief-day group.[1]

The differential effects of the three treatment programs were evaluated at admission, at 3 weeks, and at 3, 6, 12, 18, and 24 months after admission. Research interviewers used the Psychiatric Status Schedule (7) with patients and the Family Evaluation Form (8) with family informants, and therapists completed the Mental Status Examination Record (9).

FAMILY EVALUATION FORM

The data reported in this paper were obtained by research interviewers who used the Family Evaluation Form (FEF) to interview family members about patients and their families during the week prior to the evaluation. The family evaluation interviews were begun a few months after the study started. The FEF, developed by Spitzer and associates (8), consists of an interview guide and an inventory of 455 items that are grouped into 45 summary scales on the basis of content and similarity to factor analytic studies of similar scales.[2] It covers three major areas: patient evaluation, family evaluation, and family difficulties due to the patient. The FEF takes approximately 45 minutes to complete.

Patient Evaluation

Some items describe the patient's psychopathology and cover such areas as subjective distress, social isolation, and disorganization-impaired reality testing. For these areas a family member was simply asked such questions as, "Has he been anxious?" and "Does he have trouble sleeping?" Other items describe the patient's role functioning.

Family Evaluation

Almost every item asked regarding the patient was also asked concerning the family (e.g., "Has anyone else in the family been anxious?" and "Has anyone else had trouble sleeping?"), and the items were scored "true" if any member of the family was reported to have exhibited the behavior. In addition to the measures of symptoms in the family, there are other items that describe such areas as household functioning, financial problems, and special problems related to children.

Family Difficulties Due to the Patient

The third group of items concerns family difficulties that are due to the patient. There are several different types of items reflecting family burden. Whenever a family member's symptoms or impaired functioning was acknowledged, the informant was asked, "Do you think it has anything to to with [the patient's] condition or was exacerbated by [the patient's] condition or situation?" There are other items reflecting difficulties that directly involve the patient, for example, "Do people feel they have to be very careful what they say or do in order not to upset him?" "Does anyone feel embarrassed or ashamed because of him?" "How much do you worry about his getting better (or getting sick again) or how his illness will affect the family in the future?" Another group of items reflects behaviors that have face validity as objective burdens on the family, for example, "Has he hit anyone?" "Did someone have to take time off from work to be with him?" "Has he been deliberately uncooperative or stubborn?"

RESULTS

The FEF evaluation at admission revealed no significant differences among the three groups on measures of the patients' psychopathology, the families' psychopathology, or the families' difficulties due to the patient. Thus the randomization procedure was successful. To evaluate the differential effectiveness of the treatment approaches, the FEF data were compared at the item and the summary scale level for the 3-, 12-, and 24-week evaluations. Both cross-sectional analysis of variance and analysis of covariance using the initial evaluation as a covariate were performed. The results reported here are derived from the cross-sectional analysis of variance because more subjects were available for these analyses since the admission FEF was introduced several months after the study began. The results from the analysis of covariance were consistent with results reported in this paper.

DESCRIPTION OF PATIENTS

Out of 72 scale contrasts comparing patients' symptoms, there were only 2 statistically significant summary scale differences among the groups. At 3 weeks, psychomotor disturbance was slightly higher for the two brief therapy groups than for the standard therapy group. At 12 weeks, the standard group had a higher score on a scale of miscellaneous psychopathology, such as poor judgment in handling money, than did the brief-out group. Thus the reports from the families agreed for the most part with those of the therapists and research interviewers. There were essentially no differences in the levels of symptoms in the patients in the three groups for any follow-up evaluations. All groups showed considerable improvement over time.

The only significant differences regarding role functioning were the following: At the 3-week evaluation the standard group had more impairment in the wage-earner and housekeeper roles than did the brief-out group. At 12 weeks both the standard and the brief-day

[1]All references to statistically significant differences involve two-tailed t tests with $p<.05$.

[2]A table presenting these summary scales, the number of items in each, and their interclass correlation coefficients of reliability is available from the authors on request.

groups showed more impairment in wage-earner functioning than did the brief-out group. The finding that the brief-out patients more quickly resumed their wage-earner role is in part explained by the larger number of patients in this group who were back in the community full time at both evaluation points. Even by 12 weeks, almost one-third of the standard group was still in the hospital and almost one-third of the brief-day group was still attending day care.

DESCRIPTION OF FAMILIES

There were no significant differences in the 7 summary scales of psychopathology of family members at 3, 12, or 24 weeks for the three groups. Regarding family functioning, at 3 weeks the families of both brief groups had more impairment in household functioning than did those of the standard group. This difference was largely accounted for by items reflecting unpleasantness at mealtimes and disagreements over handling money. There were no differences in any of the measures of family functioning at 12 or 24 weeks.

Family Difficulties Due to the Patient

The only statistically significant differences in measures of family difficulties attributable to the patient's condition or situation, out of 117 contrasts, were at 3 weeks. The brief-day group had a higher score on the summary scale of community problems due to patient than did the brief-out group; the brief-out group had a higher score on the scales of objective burden due to patient and psychiatric treatment due to patient than did the standard group. The difference in objective burden was primarily accounted for by items reflecting the patient's uncooperativeness and interference and the family's statement that other adults and children in the family were "neglected because of the patient."

At the end of the interview, the rater completed the following single 5-point global item: "Taking everything into consideration, how much of a burden do you think this patient has been on his family during this week?" The mean level for the three groups was not statistically significantly different at any of the evaluations, although at 3 weeks both brief groups showed more ratings in the "moderate" and "severe" categories. Thus the data seem to indicate that there were few differences among the groups and that those differences which were found were at 3 weeks.

It is important to realize that over 90% of all brief-therapy patients were sleeping at home at that time and had been there an average of 16 days, while over half of the standard patients were still full-time inpatients and those sleeping at home had been there an average of only 6 days.

Frequently Reported Family Problems

What kinds of family difficulties attributed to the patient's condition or situation were reported at 3 weeks, *regardless of treatment group membership* (since there were no major differences between the groups)? Table 1 presents items that were either commonly reported (by more than 20% of the families) or that describe problems frequently mentioned in the literature on family burden. The results are presented for the total group and, to determine any differential effects due to the location of the patients, for the families of the 100 patients who were at home and the 53 patients still hospitalized. (Since the family evaluation interviews were begun a few months after the study started, the first 22 patients did not have the initial FEF interview.)

Almost two-thirds of the families reported worrying about the future because of the patient's illness. Other common problems included various manifestations of subjective distress, such as trouble sleeping, nervousness, having to be careful not to upset the patient, and worrying about financial problems. Few families reported being embarrassed or ashamed, and none were afraid of being harmed by the patient.

The most common items having to do with objective burden reflected the patients' failure to contribute as much financial support as would be expected, the families' having to assume responsibilities that had been the patients', and being inconvenienced because of the amount of time spent with the patient or doing things for him. Specific patient behaviors that have face validity for indicating burden, such as being noisy at night or deliberately uncooperative, were of low frequency. The most frequent was the report that the patient was irritable or angry (16%). It is of great interest that there were few differences in the frequency of items reflecting burden as a function of whether the patient was in the community or in the hospital, and none was significant. Family members reported symptoms such as insomnia and nervousness whether the patient was at home or in the hospital.

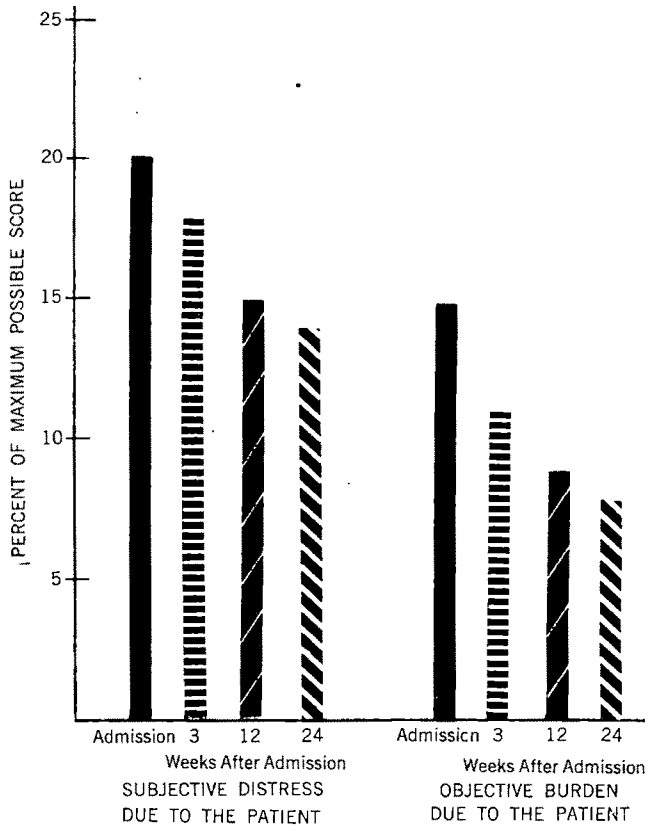
Evaluating all of the families together regardless of treatment group, were there changes over time in family difficulties attributed to the patient's condition or situation? There were only two summary scales reflecting family difficulties on which there was sufficient magnitude on admission for there to be detectable change over time (figure 1). These were subjective distress in family members attributed to the patient's condition and objective burden due to the patient. At each successive follow-up evaluation, the scores on both scales showed considerable improvement in both measurements. This agrees with the interviewers' global rating of overall family burden, which declined from 32% of families with a "moderate" or "severe" burden at 3 weeks to 21% at 24 weeks. Examination of specific items shows a similar downward trend, with the difficulties previously noted as most commonly reported at 3 weeks still most common at 24 weeks, for example, "worry about the future" (62% to 47%), "nervous, tense, afraid" (37% to 26%), "have to be careful not to upset the patient" (35% to 24%), "trouble sleeping" (20% to 16%), "had to assume patient's responsibilities" (38% to 19%).

TABLE 1
Percent of Family Respondents Reporting Family Difficulties Due to the Patient at 3 Weeks*

Item	Total (N=153)**	Patients at Home (N=100)	Patients Still Hospitalized (N=53)
Subjective distress in one or more family members due to the patient			
Worry about the future	62	62	62
Nervous, tense, afraid	37	35	40
Have to be careful not to upset patient	35	37	30
Sad, depressed	25	26	25
Trouble sleeping	20	19	22
Worrying about financial problems	20	16	28
Feel embarrassed or ashamed	7	9	4
Afraid of being harmed by patient	0	0	0
Objective burden due to the patient			
Patient contributes less money than if well	42	39	47
Family had to assume patient's responsibilities	38	37	40
Family is inconvenienced because of amount of time having to spend with patient or doing things for him	21	22	19
Patient is irritable or angry	16	19	12
Patient is afraid to be alone	14	18	6
Family missed work	14	9	4
Some adult in family is neglected	10	14	4
Patient is deliberately uncooperative	9	11	6
Patient makes demands on family	9	10	8
Patient is noisy at night	8	11	4
Patient interferes with the activities of others	7	9	2
Patient gets into arguments	3	5	0
Patient gets into fights	2	2	2
Patient needs help with everything (dressing, etc.)	2	1	4

* Scaled items were considered present if rated as moderate or above.
** Since the family evaluation interviews were begun a few months after the study started, the first 22 patients did not have the initial FEF interview.

FIGURE 1
Changes in Measures of Family Burden



Effects on Children

Slightly over one-third of the families had a child of 18 years or younger living at home. In one-half of these families the patient was the parent, and in the other half the patient was an older sibling or some other relative. Since the number of families with children is small, the results are reported as trends that are not statistically significant. At 3 weeks the level of disturbance or problems in all the children was small. The most common disturbance was in the area of subjective distress. One-fifth of the families reported having one or more children who were either quite a bit or extremely "unhappy or upset." The frequencies of all other items ranged from 0 to 10%.

Disturbances in children were rarely attributed to the patient's condition, with the exception of subjective distress: approximately three-fourths of the informants who reported an unhappy or upset child attributed it in some way to the patient's condition. It is noteworthy that this attribution was made whether the patient was at home or in the hospital. However, for a few of the other items, which were rarely reported (average=7%), such as the child being hyperactive, disobedient, or angry due to the patient, the patient was invariably living at home.

At the time of the 3- and 24-week evaluations, how were the patients who had children and were living at home functioning as parents (N=27 and 35, respectively)? We have only the interviewer's global judgment of parental role performance after asking the family informant questions about parental role functioning. At 3 weeks 69% of the parents were judged "good" or "very good" in performance of this role, while 22% were rated "poor" or "very poor." By 24 weeks 86% were rated "good" or "very good," and 11% were rated "poor" or "very poor."

TABLE 2
Correlation of Patient Psychopathology with Measures of Family Burden at Admission and 3 Weeks

Patient Psychopathology	Family Subjective Distress Due to the Patient		Family Objective Burden Due to the Patient		Interviewer's Judgment of Family Burden	
	Admission R	3 weeks R	Admission R	3 weeks R	Admission R	3 weeks R
Subjective distress	.34	.33	.28	.67	.33	.56
Social isolation	.22	.33	.23	.36	.34	.36
Disorganization—impaired reality testing	.32	.53	.50	.66	.49	.47
Belligerence—unpleasantness	.41	.57	.62	.69	.44	.52
Psychomotor disturbance	.21	.42	.24	.58	.32	.53
Alcohol, drugs, antisocial behavior	.27	.42	.22	.51	.17	.39
Miscellaneous psychopathology	.22	.36	.47	.43	.24	.39
Patient's occupational role functioning	.16	.24	.34	.36	.24	.40

Relationship Between Patient Psychopathology and Family Burden

Which types of patient psychopathology had the greatest relationship to family burden on admission and at 3 weeks? Table 2 shows the intercorrelation between the different summary scales of patient psychopathology and the three major summary measures of family burden (family subjective distress due to the patient, family objective burden due to the patient, and interviewer's judgment of family burden). As expected, such patient behaviors as belligerence, unpleasantness, disorganization, and those which reflect impaired reality testing had the highest correlation with measures of family burden. The generally higher correlation at 3 weeks than at admission is partially accounted for by the greater variability among the patients at 3 weeks, since on admission most patients were moderately to severely ill while at 3 weeks some were in remission while others remained severely ill.

Family Attitude Toward Treatment Program

What was the attitude of the families in the different groups toward the treatment programs? Although none of the differences was statistically significant, some interesting trends are suggested. It is of note that at 3 weeks twice as many of the informants in the standard and brief-day groups as in the brief-out group judged that the patient, who was now at home, had come home too soon. This finding is remarkable since most of the standard patients were home because the therapists thought they were ready, whereas many of the brief-out patients were home only because the therapists were conforming, somewhat reluctantly, with the study protocol. The difference between the brief-day and brief-out groups is equally puzzling since the expectation was that the availability of transitional day care would lessen the burden on the family. By the 24-week evaluation there were no real differences among the groups, but slightly over one-fourth of all families still believed that the patient had come home too soon.

Regarding the item, "Should the patient be back in the hospital?," at 3 weeks 30% of the brief-day families answered in the affirmative compared with 13% of the brief-out and 16% of the standard families. By 24 weeks about twice as many of the standard informants (21%) as brief informants (11% brief-day, 9% brief-out) thought the patient should be back in the hospital, suggesting that the longer initial hospitalization produced more family intolerance.

The informants' attitudes were generally positive toward the treatment staff. Only the standard group showed a decline in a positive attitude from the 3rd to the 24th week (82% to 66%), whereas both brief groups showed a trend in the opposite direction.

DISCUSSION

In this paper we have attempted to compare the initial differential effects on patients' families of brief hospitalization (average 11 days), with or without transitional day care, with standard hospitalization (average 60 days), with discharge at the therapist's discretion. All patients were offered outpatient aftercare. The overall finding of the study is that there were very few statistically significant differences on any of the measures among the three treatment groups in spite of numerous contrasts made. In the discussion that follows, the reader should keep in mind that some of these differences could have occurred by chance and that the results are based on interviews of family informants rather than on direct observations of family functioning.

The Patients

Generally, the family informants' reports of patient psychopathology agreed with the ratings of research interviewers who examined patients directly and with the ratings made by the patients' therapists, which were reported previously (1). Initially, there were no

significant differences in psychopathology among the groups, and only a few small differences were found at 3, 12, and 24 weeks after admission. Since family members had more opportunity to interact with and observe the patients in both brief therapy groups at 3 weeks (when over 90% of them were home, while most standard patients were still hospitalized), it might have been expected that patients in the brief groups would have been described as "sicker." On the other hand, patients in the brief groups might have been considered less sick by family members because hospital staff influenced their judgment by stating that the patient was no longer in need of hospitalization. Even if this attitude existed, it is unlikely to have affected the FEF scores because the specificity of the items reduced the possibility of any "halo effect."

Informants' reports of patient role function indicated that the brief-out patients were less impaired in the wage-earner role than were the standard patients at 3 weeks and both the standard and brief-day patients at 12 weeks. This is probably related to a lack of opportunity to work while on inpatient or day-patient status, loss of job because of prolonged absence, or a lack of motivation to work (regression with lowered self-esteem and self-confidence).

The Families

The intergroup differences in family psychopathology, family functioning, and subjective and objective burden were minimal in all cases. The only differences occurred at 3 weeks, when some of the brief-out patients exhibited unpleasantness, uncooperativeness, and negativism. This finding was not unexpected since many of the brief patients were still in the process of resolution of their acute psychotic episodes. The major positive effect of brief hospitalization on the families was the greater likelihood that brief-out patients would return to work and contribute financially, thus lessening family financial worries. This was true at each of the follow-up evaluations.

The research interviewers' global evaluation of family burden tended to confirm the finding that brief hospital treatment placed an additional burden on some families at 3 weeks. Despite this, at 3 weeks 82% of the families of brief-out patients were in favor of having the patient at home, and only 13% believed that the patient should be in the hospital.

Satisfaction with the treatment program was very high for all groups. This is probably related to the positive relationship that families developed with our active and supportive social service staff. However, it is interesting to note that by 24 weeks, 28% of family informants from all groups believed the patient came home too soon. Of further interest is the finding at 24 weeks that twice as many of the standard informants (21%) as all brief informants (10%) believed that the patient should be back in the hospital despite the longer initial hospitalization. This attitude was present even though there were no statistically significant intergroup differences on any measures of burden and not even any trends in the direction of more burden on the standard families. This included the interviewers' global evaluations, which described 20% of all families as having moderate to severe burden. Perhaps during the longer absence of the standard patients from their families family members "closed ranks," i.e., they assumed some of the patient's roles in the family, were less tolerant of deviant behaviors, and were not so ready to reintegrate the patient into the family.

What accounts for the differences between brief-day and brief-out informants' attitudes at 3 weeks regarding a feeling that the patient had come home too soon (37% for brief-day versus 18% for brief-out) and that the patient should be back in the hospital (30% for brief-day versus 13% for brief-out)? Since only about half of the patients in the brief-day group used day care, the others going directly to outpatient care, it is most likely that a chance difference in demographic characteristics of the two samples is largely responsible. The brief-day patients were significantly more likely to be women, married, and parents. It has been found that the mother's role in family functioning is most vital and difficult to substitute for (10), and this might account for a greater intolerance for an imperfectly functioning mother, especially if the informant was the husband. These demographic differences between groups may also account for the brief-day group's greater utilization of social service time in the first 3 weeks, as reported in our previous paper.

Our failure to find any major *differential* family burden as a function of length of hospitalization should not obscure the finding that there is considerable burden for many families when one member has a serious psychiatric illness. This burden is understandably greatest just prior to hospitalization but persists long after the patient has shown considerable improvement and is back in the community.

The possible deleterious effects on children of returning a seriously disturbed family member to the home while he is still in the process of recovering from an acute episode is an important consideration. Results for all groups at 3 weeks indicated that reported disturbances in children attributed to the patient's condition were rare, but when they did occur the patient was at home. In addition, most of the patients who were parents were apparently able to perform well in their parental role immediately after a brief period of hospitalization, although a small group of parents were reported to be performing very poorly and it is unknown whether a more prolonged hospitalization would have benefited their children. It might be important to monitor closely the performance of parents sent home after a brief hospitalization.

Generally, the results indicate that brief hospitalization has several positive effects on family functioning, primarily earlier resumption of occupational role functioning and less financial burden, with few significant deleterious effects. In our previous paper we concluded that brief hospitalization was generally preferable to longer hospitalization as far as the patient was

concerned, and it is evident that a similar conclusion applies for most families, at least insofar as our initial results indicate. This conclusion may only be applicable to programs that offer continuous care and that consider hospitalization as only one modality in a spectrum of treatment services.

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Prognostic Correlates of Psychotherapy in Psychiatric Outpatients

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The authors examined the follow-up data for 113 psychiatric outpatients who had been treated for up to a year in an outpatient community mental health center. Correlations between therapist and patient ratings of improvement were generally low, and analyses were done separately for therapist and patient ratings. The strongest confirmed hypothesis was the relationship between therapist and patient ratings of improvement and therapist and patient evaluations of each other as likable, physically attractive, and either a good patient for treatment or a competent therapist. The authors discuss the advantages and disadvantages of multivariate statistics for the analysis of psychotherapy data.

STUDIES OF PSYCHOTHERAPY have accumulated in the literature, resulting in several comprehensive reviews (1–4). These reviews have emphasized the need for further data about the correlates of clinical course, prediction of improvement, relationship between ratings of improvement by the patient and therapist, relationship of the placebo effect to improvement, relationship between positive feelings of the patient and therapist toward each other and clinical course, and the application of multivariate procedures to the data of such studies.

Our purposes in this study were to test specific hypotheses derived from the literature and from a previous study (5), to relate characteristics of patients and therapists to clinical course, and to develop meaningful hypotheses for subsequent study. This work was stimulated by our continued interest in the placebo effect, patient-therapist attraction, and other variables in treatment. It was in part an attempt to replicate a previous study of the placebo effect (5), in which clinical improvement was positively associated with a quantified measure of reaction to a placebo test and negatively associated with chronicity and intensity of symptoms. As a result of our previous work (6–11) we became interested in placebo test variables and the attitudes of the patient and therapist toward each other as important variables in therapy.

The hypotheses involved several sets of variables that were expected to predict clinical course. We hypothesized that improvement during treatment would correlate positively with reaction to placebo and patient-therapist attractiveness and negatively with chronicity of illness and severity of symptoms.

METHOD

The initial group of subjects for this study were 113 patients who consecutively applied for treatment at a community mental health clinic in Westchester, N.Y., who fulfilled the usual outpatient criteria: age between 17 and 65; 6 or more years of education; capable of completing forms and following instructions; not referred by a court or legal agency; not diagnosed as organic, senile, addicted, or alcoholic; not in psychiatric treatment during the past 6 months; not previously in treatment at the clinic; and in treatment at the clinic for at least one visit. Patients were evaluated by the clinic director within 1 week of their application and assigned to appropriate therapy with 1 of 13 therapists, who varied in sex, discipline, experience, and treatment orientation. The patients were evaluated for follow-up status up to 1 year after the initial evaluation. Patients were informed that they were participating in a study of the therapeutic process.

DEPENDENT VARIABLES

Our dependent variables consisted of ratings of clinical course by patients and by therapists on a 7-point scale that ranged from marked worsening to marked improvement. Follow-up status was evaluated for four different groups of patients according to how long they remained in treatment: patients in treatment for 1–3

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months (N=28), 4–6 months (N=25), 7–12 months (N=34), and patients still in treatment after 12 months (N=26). A final set of dependent variables consisted of the patient and therapist ratings for 97 of the patients when their therapy terminated. Follow-up data were available for about 85% of the sample of 113; about half of the unobtainable data were for patients in the group in treatment for 1–3 months.

INDEPENDENT VARIABLES

With the evaluations of clinical course described above as dependent variables, the variables described below were selected as possible predictors of clinical course, some of them according to hypotheses previously stated.

The independent variables comprised two broad groups: pretreatment variables, or data obtained before treatment began, and concurrent-with-treatment variables, or data obtained during therapy.

Pretreatment Variables

Six subgroups of variables made up the pretreatment group: demographic, history of illness, diagnostic, symptom, MMPI (including the authoritarian scale), and our placebo test scores.

The demographic variables included age, sex, race, religiosity, social class, ethnic background, national background, sibling rank, number of siblings, and marital status. Our rating of religiosity was based on the patient's belief in a personal God and the frequency of his or her religious observance. The mean age of the patients was 32, and their mean social class was 4.1 (12). Seventy-three percent of the patients were women, 58% were white, 89% were Catholic or Protestant, and 21% were single.

The history of illness variables included age at onset of illness, duration of current episode, duration of present illness, previous psychiatric treatment, and previous psychiatric hospitalization. The mean age at onset of illness was 28 years, and mean duration of current episode was 8.7 months. Thirty-five of the patients had had previous psychiatric treatment, and 12% had been hospitalized previously.

The diagnostic variables included the diagnoses of neurosis, psychosis, personality disorder, anxiety, and depression. These diagnoses were based on the initial impression of the clinic director. The phi coefficients between initial diagnosis and diagnosis after treatment varied between .79 and .88. Sixty-five percent of the patients were diagnosed as neurotic, 10% as psychotic, and 25% as having a personality disorder.

The symptom variables were derived from a 47-item symptom checklist developed by Parloff and associates (13) and Frank and associates (14) and modified by Williams and associates (15). The factor scales used in this study were general neurotic feelings, somatization, and fear-anxiety. Clinical clusters were depression, obsessiveness, withdrawal, paranoia, feelings of unreality, and total score.

The MMPI variables included the 13 standard scales as well as the following experimental scales (16); ego strength, anxiety factor, repression factor, dependency, dominance, social desirability, acquiescence (17), sum true (16, 18, 19), inhibition of hostility, and Taylor manifest anxiety. The authoritarian scale (20) was included with the experimental MMPI scales because it did not fit elsewhere.

The placebo test variables have been described in greater detail elsewhere (21, 22). These were derived from the patient's responses to placebo rated on a 7-point scale that ranged from maximum worsening to complete relief of symptoms during the hour following ingestion of a placebo tablet. Responses were categorized as positive placebo effect (39 patients), negative placebo effect (20 patients), or neutral response to the placebo (39 patients). A final group consisted of 15 patients who refused to take the placebo test.

Concurrent-with-Treatment Variables

The variables obtained during therapy included four subgroups: therapist, length and type of treatment, type of termination of therapy, and patient-therapist attractiveness.

The therapist variables consisted of the sex and professional status of the therapist. Of the 8 female and 5 male therapists, 5 were psychiatrists, 5 were social workers, and 3 were psychologists.

The type of treatment variables comprised individual treatment (90 patients) and combined individual and group therapy (23 patients). About half of the patients in each group also received drug therapy.

The length of treatment variables included number of therapy sessions (mean=16.1), months of treatment (mean=6.7), and sessions per month (mean=2.1). The length and intensity of treatment in this study compared favorably with the length of treatment reported by Garfield (23), who found that about 67% of 560 patients seen at a Veterans Administration clinic came for fewer than 10 interviews.

The variable of type of termination of therapy included mutual termination of treatment (39% of the patients), dropping out of treatment (35%), and remaining in treatment after 12 months (20%). Six percent of the patients had moved, died, or could not be located at the time of follow-up.

The patient-therapist attractiveness variables were obtained at 3, 6, and 12 months, and when therapy terminated, on a 7-point scale that rated the patient's and therapist's evaluation of each other as likable, physically attractive, and a good patient for treatment or a competent therapist. These variables were examined during the course of therapy at each evaluation period.

DATA ANALYSIS

The tests of association used to test our hypotheses included the phi coefficient, chi-square test, and prod-

TABLE 1
Correlations Between Therapist and Patient Ratings of Improvement

Patient Group	Time of Evaluation	Correlation	Significance*
Patients in treatment for 1–3 months (N=15)	1–3 months	r=−.39	n.s.
Patients in treatment for 4–6 months (N=22)	1–3 months	r=.05	n.s.
	4–6 months	r=.02	n.s.
Patients in treatment for 7–12 months (N=58)	1–3 months	r=.26	p<.05
	4–6 months	r=.43	p<.001
	More than 7 months	r=.44	p<.001
Patients rated at completion of therapy (N=90)	Completion of therapy	r=.29	p<.01

* By two-tailed t test.

uct-moment correlation coefficient.

The dependent variables were the ratings of improvement by the patient and the therapist. As shown in table 1, the correlations between the ratings of the patient's improvement by the patient and the therapist were generally low: negative for patients in treatment for 1–3 months, uncorrelated for patients in treatment for 4–6 months, moderately correlated for patients in treatment for 7–12 months, and weakly correlated for all patients rated at termination of therapy. These low correlations were unexpected and led to an interest in understanding the different criteria used by therapists and patients in judging clinical course. Low correlations between patient and therapist ratings have been reported elsewhere (4, 24).

To identify variables associated with various measures of placebo reaction, 73 independent variables were categorized into the 10 groups described above. Subsequently, independent variables were introduced within each group in a stepwise multiple regression analysis until the last variable selected did not account for a sufficient amount of dependent variable variance to be significant at the 5% level. The purposes of this analysis were to select the variables most highly associated with the evaluation of clinical course by patients and therapists, to eliminate those contributing redundant variance, and to identify those accounting for unique variance in the dependent variables.

In a summary regression analysis, the variables selected from each of the 10 groups were submitted to stepwise analysis to make a final selection of variables accounting for significant and unique variance in clinical course variables. Only two summary regression analyses will be presented in this paper.

RESULTS

Table 2 summarizes the significant correlations between 73 independent or predictor variables and for each of the two dependent variables. Since there were 20 significant correlations for the therapist ratings of improvement and 31 for the patient ratings of improvement, more significant correlations were obtained for each of the dependent variables than the 7.3 expected by chance at the .10 level of significance.

HYPOTHESES

The predictions about positive placebo reactions and improvement were not supported, although trends in that direction were found.

An unexpected finding occurred for the patients who refused to take the placebo test. Refusing was negatively correlated with the therapist's rating of improvement, but refusing was not related to the patient's rating. The correlation between refusing to take the placebo test and therapist rating of improvement at 4–6 months was −.33 ($p<.10$); at termination of therapy for all patients it was −.20 ($p<.05$).

The hypothesis that chronicity of illness would be negatively related to improvement was consistently but modestly supported by the therapist's, but not by the patient's, rating of improvement. The correlation between therapist rating of improvement and duration of current episode was −.20 ($p<.05$); the correlation between therapist rating and duration of present illness was −.21 ($p<.05$).

The hypothesis that the patient's report of severity of symptoms before treatment would correlate negatively with clinical course was strongly supported according to the patient's rating, as indicated in table 2. This relationship was also apparent in the MMPI scores for patient but not for therapist ratings.

The hypothesis that the patient's evaluations of the therapist as likable, physically attractive, and competent would positively correlate with each other and with the therapist's rating of improvement was confirmed, as indicated in table 3. Similarly, the hypothesis about the therapist's evaluation of the patient was confirmed. Intercorrelations of the three varied between .46 ($p<.001$) and .63 ($p<.001$). The multiple correlation coefficients for likable, attractive, and good or competent with improvement were .56 for the therapist ($p<.001$) and .51 for the patient ($p<.001$). The hypothesis that patient and therapist attitudes would correlate with each other was not confirmed.

The possibility that the patient's evaluation of the therapist was an objective judgment of his or her likableness, physical attractiveness, or competence was evaluated by obtaining the ratings of therapists about each other on the same variables. There was no relationship between the judgments of the patient and therapist on these variables.

Another way of illustrating the relationship between patient's and therapist's liking each other and improvement is shown in figure 1. The percent of patients rated improved by patient and therapist was related to their scores on likability for the four periods of evaluation during therapy (see figure 1) and the evaluation period

TABLE 2
Variables Significantly Correlated with Patient and Therapist Ratings of Improvement at Completion of Therapy

Variable	Patient Ratings			Therapist Ratings		
	Number	r	Significance*	Number	r	Significance*
Demographic						
Religiosity	94	.32	p<.01	96	.20	p<.05
History of illness						
Age at onset	94	.07	n.s.	94	.27	p<.01
Duration of current episode	91	−.01	n.s.	93	−.20	p<.05
Duration of present illness	93	−.09	n.s.	95	−.21	p<.05
Diagnostic						
Neurosis versus other diagnoses	95	−.16	n.s.	97	.28	p<.01
Personality disorder versus other diagnoses	95	.03	n.s.	97	−.35	p<.001
Neurosis versus personality disorder	82	−.04	n.s.	84	.37	p<.001
Symptom checklist						
Obsessive-compulsive	95	−.21	p<.05	97	−.09	n.s.
Paranoia	95	−.32	p<.01	97	−.04	n.s.
Unreality	95	−.22	p<.05	97	.05	n.s.
Depression	95	−.17	p<.10	97	−.02	n.s.
General neurotic feelings	95	−.21	p<.05	97	−.02	n.s.
Somatization	95	−.32	p<.01	97	−.10	n.s.
Fear-anxiety	95	−.32	p<.01	97	−.03	n.s.
Total	95	−.31	p<.01	97	−.15	n.s.
MMPI						
Validity	91	−.36	p<.001	92	−.11	n.s.
Hypochondriasis	91	−.26	p<.05	92	−.15	n.s.
Depression	91	−.31	p<.01	92	−.14	n.s.
Hysteria	91	−.28	p<.01	92	−.16	n.s.
Psychopathic deviate	91	−.40	p<.001	92	−.29	p<.01
Paranoia	91	−.30	p<.01	92	−.15	n.s.
Psychasthenia	91	−.33	p<.01	92	−.13	n.s.
Schizophrenia	91	−.32	p<.01	92	−.17	p<.10
Social introversion	91	−.26	p<.05	92	−.03	n.s.
Anxiety	91	−.36	p<.001	92	−.11	n.s.
Dependency	91	−.26	p<.05	92	−.08	n.s.
Dominance	91	.26	p<.05	92	.09	n.s.
Social desirability	91	.32	p<.01	92	.16	n.s.
Taylor manifest anxiety	91	−.29	p<.01	92	−.13	n.s.
Acquiescence	90	−.18	p<.10	91	−.02	n.s.
Placebo test						
Refusers versus others	95	−.03	n.s.	97	−.20	p<.05
Patient-therapist attractiveness						
Therapist rating of patient						
Physically attractive	90	.05	n.s.	97	.35	p<.001
Good for treatment	90	−.05	n.s.	97	.54	p<.001
Likable	90	−.01	n.s.	97	.41	p<.001
Patient rating of therapist						
Physically attractive	95	.40	p<.001	90	−.01	n.s.
Competent	95	.46	p<.001	90	.18	p<.10
Likable	95	.30	p<.01	90	.11	n.s.
Type and length of treatment						
Total number of sessions	95	.09	n.s.	97	.19	p<.10
Months of treatment	95	.09	n.s.	97	.26	p<.01
Type of termination of therapy						
Withdrew from treatment	95	−.20	p<.05	97	−.33	p<.001
Mutually terminated treatment	95	.24	p<.05	97	.27	p<.01
Withdrawal versus mutual termination	68	−.29	p<.05	67	−.47	p<.001
Other therapists' rating of therapist						
Likable	90	−.05	n.s.	93	−.24	p<.05
Competent	90	.22	p<.05	93	−.11	n.s.

* By two-tailed t test.

at termination of therapy. If patient and therapist liked each other, their respective ratings of improvement varied between 77% and 96%. However, if the therapist did not like the patient, the improvement reported by the therapist varied between 52% and 62%. Of even more importance, if patients did not like their therapists, only 21% to 25% reported themselves improved at 1–6 months, and none reported improvement at 7–12

TABLE 3
Intercorrelations of Patient Ratings (N=95) and Therapist Ratings (N=97) of Improvement, Likability, and Attractiveness or Competence at Completion of Therapy

Variable	r Values for Patient Ratings				r Values for Therapist Ratings			
		Therapist				Patient		
	Improvement	Likable	Attractive	Competent	Improvement	Likable	Attractive	Good
Patient rating of improvement	—	.30	.40*	.46*	.29**	−.01	.05	.05
Patient rating of therapist								
Likable	.30*	—	.51*	.63*	.11	.10	.16	−.02
Physically attractive	.40*	.51*	—	.46*	−.01	.06	.00	−.04
Competent	.46*	.63*	.46*	—	.18***	.09	.10	.12
Therapist rating of improvement	.29**	.11	−.01	.18***	—	.41*	.35*	.54*
Therapist rating of patient								
Likable	−.01	.10	.06	.09	.41*	—	.58*	.61*
Physically attractive	.05	.16	.00	.10	.35*	.58*	—	.46*
Good patient for treatment	.05	−.02	−.04	.12	.54*	.61*	.46*	—

* $p<.001$ by two-tailed t test.
** $p<.01$ by two-tailed t test.
*** $p<.10$ by two-tailed t test.

months. Finally, in the group of patients evaluated at completion of therapy, only 4 of the patients did not rate their therapists as likable; all 4 of these patients reported themselves unimproved.

Multiple Regression Analyses

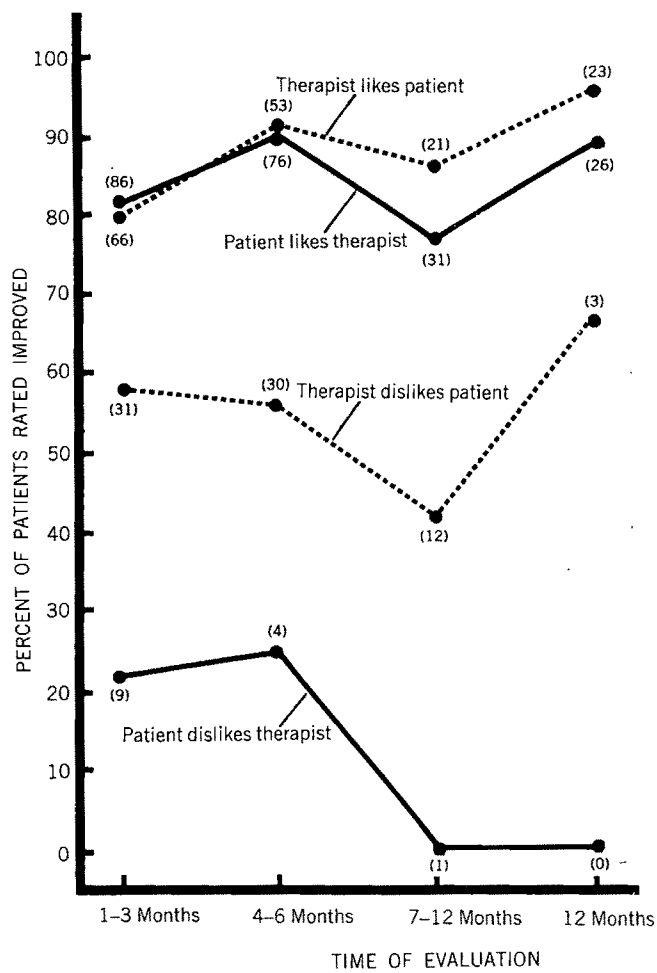
The multiple regression hypothesis was that there would be a predictive relationship for the placebo test, history of illness, symptom, patient-therapist attractiveness, and clinical course variables.

For the variable of patient's rating of improvement, 4 pretreatment and 3 concurrent-with-treatment variables were selected from 73 original variables by stepwise multiple regression analyses (see table 4). The multiple correlation coefficients were .52 for the 4 pretreatment variables and .56 for the 3 concurrent-with-treatment variables. When all independent variables were combined, the multiple correlation coefficient was .63, indicating that about 40% of the variance could be attributed to these variables. Significant, unique, and independent variance was contributed by the variables of competent and physically attractive therapist, mutual termination, and low initial MMPI scores for psychopathic deviate and anxiety factor.

For the variable of therapist's evaluation of improvement, 3 pretreatment and 2 concurrent-with-treatment variables were selected (see table 4). The multiple correlation coefficients were .44 for pretreatment variables and .57 for concurrent-with-treatment variables. When all of the independent variables were combined, the multiple correlation coefficient was .66, indicating that about 44% of the variance in improvement could be attributed to these variables. Significant, unique, and independent variance was contributed by the variables of good patient for treatment, low MMPI score for psychopathic deviate, taking the placebo test, and short duration of illness.

These results indicate partial support for the hypotheses selecting the most efficient set of variables for pre-

FIGURE 1
Relationship Between Improvement and Likability According to Patient and Therapist Ratings*



*Numbers in parentheses designate number of patients evaluated.

TABLE 4
Results of Multiple Regression Analyses

Item	Multiple R	R^2	Simple r	Partial r	Beta
Independent variables with therapist' evaluation of improvement at completion of therapy as dependent variable					
Pretreatment variables					
Personality disorder	.33	.11	−.33*	−.27**	−.26
Psychopathic deviate (MMPI)	.39	.16	−.29**	−.25***	−.24
Placebo test refusers	.44*	.19	−.20***	−.21***	−.19
Concurrent-with-treatment variables					
Good patient for treatment	.54	.29	.54*	.50*	.48
Withdrew from therapy	.57*	.33	−.33*	−.24***	−.21
Pretreatment and concurrent-with-treatment variables					
Good patient for treatment	54	.29	.54*	.57*	.52
Psychopathic deviate (MMPI)	.61	.37	−.29**	−.34**	−.28
Placebo test refusers	.65	.42	.20***	.29**	.23
Duration of present illness	.66*	.44	−.21***	−.18†	−.14
Independent variables with patient evaluation of improvement at completion of therapy as dependent variable					
Pretreatment variables					
Psychopathic deviate (MMPI)	.40	.16	−.40*	−.21***	−.22
Anxiety factor (MMPI)	.45	.20	−.36*	−.20†	−.19
Religiosity	.48	.23	.32**	.26***	.26
Born in United States of native parents	.52*	.27	.15	.23***	.21
Concurrent-with-treatment variables					
Competent therapist	.46	.21	.46*	.36*	.36
Mutual termination of therapy	.52	.27	.24***	.27**	.23
Physically attractive therapist	.56*	.31	.40*	.23***	.22
Pretreatment and concurrent-with-treatment variables					
Competent therapist	.46	.21	.46*	.35	.32
Psychopathic deviate (MMPI)	.57	.33	−.40*	−.25***	−.22
Mutual termination of therapy	.60	.36	.24***	.20†	.16
Physically attractive therapist	.62	.38	.40*	.19†	.17
Anxiety factor (MMPI)	.63*	.40	−.36*	−.18†	−.16

* $p < .001$ by two-tailed t test (F test for R).
** $p < .01$ by two-tailed t test (F test for R).
*** $p < .05$ by two-tailed t test (F test for R).
† $p < .10$ by two-tailed t test (F test for R).

dicting clinical course, although the exact combination was not anticipated.

CONCLUSIONS

The following tentative conclusions can be derived from this preliminary study. Both patients and therapists rated patients described as psychopathic deviates on the MMPI as less likely to improve in therapy, a conclusion consistent with clinical experience. Positive evaluations of each other by both patient and therapist were related to their respective ratings of improvement but were uncorrelated with each others' positive evaluations and ratings of improvement. Whether the likability, attractiveness, and good/competent variables were antecedents, concomitants, or consequences of improvement cannot be specified by our findings. Patients rated themselves improved if they terminated treatment with mutual consent of the therapist and if they had low initial complaints of anxiety. Therapists rated chronic patients and those who refused to take a drug test as not improving in psychotherapy.

COMMENT

For studies of psychotherapy that include many variables, multiple regression can help select variables that make significant contributions and, further, identify variables that account for significant and unique variance in the dependent variables.

Shortcomings of the procedure are that large samples and sophisticated techniques, including assessment of reliability, data reduction with factor analysis, and computer facilities, are necessary for analysis of the data. The results from multiple regression procedures tend to be unstable, especially if large numbers of variables are examined; replication is therefore essential. Considering the large number of variables examined, there is, of course, the possibility that the relationships

reported in this paper were due to chance. The contributions and shortcomings of this study can best be identified through replication with increased attention to sampling, conceptual, and measurement issues. Such studies are in progress.

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The Murdered Child and His Killers

BY DAVID KAPLUN, M.S.W., AND ROBERT REICH, M.D.

The authors studied 112 cases of child homicide in New York City in 1968–1969 to identify contributing social and psychiatric factors and to determine the fate of the surviving siblings and the degree of involvement of the city's social agencies with the families. There was a pattern of long-term familial child maltreatment extending to the siblings and continuing after the murders. The victims were usually illegitimate preschoolers; the assailants, usually the mothers or their paramours, had backgrounds of assaultiveness and social deviance and killed in impulsive rage. Reports of sexual abuse of victims or of suicide or psychosis among assailants were rare. The authors present case illustrations and offer guidelines for improved prevention by psychiatrists and social workers.

EACH WEEK, municipal statistics tell us, at least one of New York City's children is murdered. The number of such killings has steadily mounted, particularly in the 1–4 age group. For this group homicides more than doubled between 1965 and 1969 compared with the previous 5 years. These figures do not take into account the deaths listed as accidental, which outnumber homicides by four to one, although review of some of these "accidental" deaths indicates that the possibility of homicidal assault cannot be excluded.

In 1968–1969, 140 apparent homicides of children under the age of 15 were reported in New York City, according to the records of the city's Chief Medical Examiner. Of these victims, 28 could not be identified. We reviewed the postmortem reports and the results of preliminary police inquiries on the remaining 112 victims. In 66 cases the victims' families were known to the city's public assistance and child welfare agencies, and we reviewed all available case reports on these families.

This report will describe the information gathered from these records on the murdered children and their siblings, parents, and assailants in an effort to determine the psychiatric and social factors contributing to the deaths of the children and to the subsequent fate of the survivors. We will review the part played by the city's mental health, child welfare, and law enforcement agencies and will consider the outlook for early identification of high-risk cases.

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THE VICTIMS

Boys outnumbered girls by 15% in the population we studied, and in the case of children over the age of 10 there were 2 boys for every girl. The majority of the children (52%) were under a year old, and another 26% were between the ages of 1 and 5.

Most of the families of the murdered children (70%) lived in areas of severe poverty, and almost all were known to the city's public welfare agency. Other authors (1, 2) have similarly reported the high incidence of child abuse cases in impoverished areas. Two-thirds of the victims from public welfare families were either the youngest children in their families or had no siblings. Two-thirds of the victims were born out of wedlock: of the 13 victims without siblings, 12 were illegitimate. Simons and associates (3) also reported high figures for illegitimate child abuse victims. The proportion of homicide victims who were illegitimate was substantially higher than the 50% illegitimacy rate that has been reported for children of New York City families on public assistance generally (4). Finally, in nine-tenths of the cases reviewed, the victims, their siblings, or both had been physically abused or neglected before the killings. A report showed that in half of 34 abuse cases in Washington, D.C., parents abused each other or siblings of the reported abused child (5).

The case of Juan A illustrates the history of a child who was abused before the homicidal assault.

Case 1. Mrs. A was 17 when she and Mr. A married, a month after she had become pregnant with her son, Juan. After 2 years her husband, whom she described as an abusive alcoholic, left her 4 months pregnant and in need of public assistance. Mrs. A's caseworker saw her as a sweet-tempered, affectionate young woman overburdened with home responsibilities. The little boy seemed happy, bright, and friendly. Mr. A made unexpected home visits, having been told by his mother that his wife had an addicted paramour. On one such visit there was a quarrel in the course of which Mrs. A slashed her husband with a kitchen knife. She spent a night in jail on his complaint.

A week later Mrs. A brought Juan, now 3, to a nearby hospital (one of the finest teaching institutions in the city) with bruises, burns, and a leg fracture, caused, she said, by a fall

from a crib against a hot radiator. During the hospitalization the child was asked about this, and said that Mommy had beaten him and burned his heels with a cigarette. Because of Mrs. A's constant visits to the hospital, with home-cooked food, the hospital concluded that the father, who visited separately, had coached the child to make false statements, and Mrs. A was allowed to take him home. Psychiatric evaluation was considered unnecessary because the public assistance caseworker concurred in this view. Eight months later the child was brought back with a swollen eye, attributed by Mrs. A to a boiler explosion in the home.

Four months later Juan was murdered. Mrs. A first stated that the massive injuries, which the postmortem report said were the result of blunt force, were caused by a convulsion the child had on a mattress with a broken spring. When a police investigation disclosed that the mattress was in good condition, Mrs. A said that her 18-year-old addicted paramour, by whom she was pregnant, had done the killing during her absence from the apartment. The young man, who had a criminal history, was released after passing a lie detector test. The two surviving siblings were taken from Mrs. A. Social workers observed that Mrs. A showed "inappropriately flat affect" when discussing the killing and that she arranged a costly funeral.

THE ASSAILANTS

Over two-thirds of the assailants in the cases we studied were parents or paramours. The most frequently named assailant was the mother, a finding that agrees with results of a study on child abuse (6). The mother usually acted alone but sometimes acted with her paramour. The biological father was the killer in only 10% of the murders, and minor siblings or other children were almost never implicated. The older the victim, the less frequently was his murderer a parent. While babies were killed by parents 83% of the time, the figure for preschoolers was 53%, that for schoolchildren under 10 was 30%, and that for those over 10 was 17%. Paramours rarely murdered their own children; instead they killed the sons of their predecessors. Except in the cases in which children were under 2 years of age, assailants and victims tended to be of the same sex. This was true in 31 (73.6%) of the 42 public welfare and other cases in which there was information on both the age and sex of the victim and the sex of his reported assailant. (Application of the Clopper-Pearson confidence coefficient formula for a binomial distribution indicates a 90% probability that the percentage would be between 61.4% and 83.3%.)

In 81% of the public welfare cases in which information was provided on the assailants, the assailants showed prehomicidal deviant behavior, mostly alcoholism, narcotics use, and criminal involvement. Diagnosed psychoses were rare, and suicide attempts were even rarer. Posthomicidal suicide attempts occurred in only 4% of the cases. This finding is contrary to some reports in the European literature (7, 8) but is similar to other American findings (9).

In 13 cases the mothers were not the killers but gave access and opportunity to the assailants and tried to protect them from being apprehended. In such cases the men, usually paramours, had criminal or assaultive histories, while the mothers were generally known as gentle and loving.

In 20% of the cases the mother was pregnant at the time of the murder; in another 9% she had a newborn child. In only 2% of the cases did the postmortem examination show that the assailant had sexually molested his victim. Finally, the means employed in the killings, mainly beating and kicking, were suggestive of impulsive rage rather than premeditation.

THE VICTIMS' FAMILIES

The families of the victims differed from the New York State public welfare family caseload described by Storfer (4) in at least three important respects: 1) the children in the homicide families less frequently all had the same biological parents (39% versus 63%); 2) the homicide families had more children under the age of 3 (73% versus 35%); and 3) the homicide families had many more teenage mothers (25% versus 2%).

Studies of the families of abused children have shown frequent severe marital discord (10). This was true of the families we studied. Of 35 cases in which there were legal or consensual marriages, 33 cases showed separations, divorces, or assaults, and in 71% of the cases the mothers had multiple short-term extramarital relationships.

In addition to child maltreatment and marital discord, all but 9.2% of the families we studied showed evidence of other behaviors prior to the assault that would be considered socially or psychiatrically deviant. These behaviors and their incidences are indicated in table 1. This evidence of a high prevalence of deviant behavior is paralleled in several studies of

TABLE 1
Type and Percentage of Deviant Behaviors Reported Among 61 Public Welfare Families of Child Homicide Victims Before the Homicides

Behavior	Percent of Families
Narcotics addiction or dependency	33.6
Alcoholism	29.7
Assaultiveness (other than child abuse)	27.9
Adult crime (excluding prostitution)	27.9
Juvenile crime	14.8
Mental retardation	13.1
Undiagnosed psychiatric condition	11.5
Psychosis	11.5
Prostitution	9.8
Juvenile conduct problems	8.2
Suicide attempts	8.2
Habitual association with criminals	6.6
Epilepsy	3.3
Other behavior requiring outpatient psychiatric care	1.6
No deviant behavior (other than child abuse) reported	9.2

child abuse and homicide both in the United States (11–13) and in New Zealand (14).

The case of Mr. and Mrs. B illustrates the role of deviant behavior and also the lack of public recognition of psychopathological factors in setting the stage for child murder and its aftermath.

Case 2. Young Mr. and Mrs. B had three sons, aged 3, 2, and 8 months. They were frequently separated during their 3-year marriage. Mr. B was a violent alcoholic, had a history of criminal activity in his teens, and continued associations with criminal friends during his long periods of unemployment. He and his wife, also an alcoholic, fought frequently. On one occasion, Mrs. B hit her husband on the head with such force that stitches were required. Both parents beat and neglected the children. The youngest died of bruises, head injuries, and malnutrition. Although the death was listed as a homicide, Mr. B's explanation that it was accidental was later accepted for lack of objective evidence to the contrary. Another child, born shortly afterward, died after 5 days, reportedly of a collapsed lung.

The parents were later brought to court on charges of neglect and abuse of their 3-year-old, who had been struck with a pot thrown by his mother at 4:00 a.m. on her return from a local bar. She had meant to strike her husband, not the child. The court, unaware of the previous deaths, did not request a psychiatric evaluation and dismissed the abuse charge, since the injury did not appear to have been deliberate. The child was placed with another relative, but the other surviving son remained in parental custody. Following this, neighborhood complaints of the parents' drunkenness, promiscuity, and child abuse continued. Psychiatric evaluation was planned but was not carried out.

In one-fifth of the cases, the victim or a sibling had been placed in an institution or foster home because of parental problems. In five of the nine cases in which the victim himself had been in such care, the killing occurred either in the foster home or during a trial discharge to the parents. The case of Victor C illustrates this pattern:

Case 3. Miss C, a soft-spoken and ladylike person, had her first out-of-wedlock child, a girl, when she was 16. Following the birth she continued living with her mother, to whom she seemed attached. When she became pregnant again at 17, she asked that the coming child be placed so she could go to business school. This was done. In the next year Miss C did not once visit the baby, Victor, but continued relationships with men, one of whom beat her so badly that her mother called the police. Miss C made such a good impression on the foster-home social worker that she arranged a trial discharge of Victor to Miss C and her mother. A few weeks later two teen-age boys whom Miss C often entertained in her apartment entered it in her absence and found the baby brutally beaten. They brought him to a hospital, where he died. The 2-year-old girl seemed unharmed.

It turned out that the child was murdered by Miss C's latest paramour, Mr. M, a drug addict with a prison record and a period in a mental hospital. When he was arrested he attempted suicide. Miss C tried to protect Mr. M first by saying that the baby had choked on food and then by saying that an aunt of Mr. M's had done the killing and that he was the finest man she had ever known. She discussed Victor's death "entirely without affect." Shortly after the murder Miss C's mother found her in bed with a girl. Both were under the influence of drugs—not the first time her involvement with narcotics had come to the agency's attention. Miss C verbalized an interest in psychiatric help at this point but broke all appointments that were made for her.

THE PROBLEM OF CONTINUING JEOPARDY

After a child has been murdered there are generally surviving siblings or subsequently born children. In 79% of the cases we studied in which children remained in parental custody following the homicide, there was evidence of possible jeopardy, and in 32%, continued neglect or abuse was a matter of record. The case of Mr. and Mrs. B illustrated such jeopardy. In a similar case no charge was pressed against the father, a violent criminal who used narcotics, after one death because the evidence was deemed insufficient for court purposes. In this case a younger child later died under suspicious circumstances, and another sustained a subdural hematoma and multiple fractures. In the latter instance the hospital physician refused to file a child-abuse complaint although he was aware of earlier injuries because he was impressed with the mother's gentle manner and did not know about either her own past episodes of ungovernable violence or the husband's history.

PSYCHIATRIC, SOCIAL SERVICE, AND LAW ENFORCEMENT INVOLVEMENT

Table 2 shows the amount of involvement of the city's many mental health, social service, and correctional agencies, excluding the public welfare department, with the public welfare families before and after the murders.

When penal and correctional institutions were excluded, we found that before the murders 61% of the public welfare families were known to social or mental health agencies and that 47% were known to such agencies afterward. In both periods, the contact with psychiatric, counseling, and guidance agencies was negligible.

Law enforcement activity, as shown by review of 60 of the public welfare cases, was meager and minimal. In 20 cases, no suspect was arrested. Of 25 cases in which postarrest information was available, 17 suspects went to trial. Virtually all alleged assailants were given short sentences on reduced charges in return for guilty pleas, and one case was dismissed because the witness to the killing was a 10-year-old sibling whose testimony was deemed inadmissible on the ground of age. Only in one case—a highly publicized one in which the father had drowned his child—was there a conviction for first-degree murder. Psychiatric evaluation was used only in the cases of four women who were sent to state hospitals.

TABLE 2
Involvement of Community Social Agencies and Institutions with Victims' Families Before and After the Murders

Type of Agency or Institution	Percent of Cases Known Before the Murders (N=59)	Percent of Cases Known After the Murders (N=57)
Correctional or penal (excluding pretrial incarceration)	13.5	21.1
Institutional or foster care for children	27.1	15.8
Inpatient psychiatric facility (including institutions for retarded)	13.5	13.9
Outpatient psychiatric service	10.2	5.3
Narcotics service	5.1	5.3
Child protective service (voluntary agency)	11.9	3.5*
Child guidance service in schools	16.9	1.8*
Family counseling (voluntary agencies)	6.8	0
Child guidance (other than school)	8.5	0

*These figures come from study of the 46 cases in which there were children who remained in the parents' care after the homicides.

DISCUSSION

The murder of a child is the final chapter in his history of maltreatment. That history develops against a background of poverty and violence. There is usually pervasive psychopathology in his family—assaultiveness, criminality, alcohol and drug abuse, and, more rarely, frank psychosis. Equally pervasive are marital discord and sexual promiscuity. The dead child, usually illegitimate, is the victim of the parental hostility that triggers the homicidal assault. That assault is unpremeditated and impulsive, and similar ones directed against siblings or spouses occur before and after the killings.

Only rarely are the violence-prone adults associated with these homicides recognized by their community agencies as needing psychiatric attention, and they do not seek such attention on their own. What, then, are the prospects for early identification of children in potential jeopardy? Such identification cannot be made with certainty. But bearing in mind that the great majority of the cases came from poverty-saturated areas and that most were known to the public welfare agency, it would seem that professionals who serve young mothers with out-of-wedlock children in such areas should identify cases in which some of the following six questions have affirmative answers:

1. Does an adult in the home have a history of assaultiveness toward children *or* adults, of involvement with crime, drugs, or alcohol, or of episodes of impulsive rage?
2. Is there an unwanted pregnancy, with a neglected or abused child already in the home?
3. Where there is a legal or consensual marriage, is it marked by discord and physical violence?
4. Is casual promiscuity or prostitution the mother's way of life?
5. When children are seriously ill or badly injured, has there been failure or delay in seeking or using available medical care?
6. Are relationships with neighbors or relatives characterized by mutual hostility or avoidance?

Further research with suitable control groups should be attempted to determine whether such questions would effectively differentiate child abusers from nonabusers. In addition, psychiatrically oriented studies should be done of the manipulative mother who does not herself do violence to her child but who creates opportunities for others to do so and whose verbal expressions of maternal solicitude are contradicted by objective observation of the treatment the child receives at her hands.

Our study throws into question the widely held belief (15) that the abused child is the family scapegoat, battered by his parents while his siblings are unharmed. We have repeatedly seen the contrary. Our study also does not tend to support the belief that severely abusing parents are receptive to counseling or psychotherapy: the extreme, long-standing psychopathology, the host of coexisting problems, and the paucity of insight and motivation all tend to point against this view for most cases.

The responsibility of the psychiatrist working in child welfare settings or in the courts should be to provide diagnosis and guidance based on examination, thorough case record review, and knowledge of the realities of ghetto life. Psychiatrists who serve as consultants to foster-care agencies or who testify in courts should see to it that psychiatrically significant criteria are correctly used in foster-parent selection, that proposed returns of children to previously abusing parents are carefully evaluated, and that psychiatric factors in abuse cases are adequately presented in court.

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Journal Policy on Multiple Authorship

It has come to our attention that there has been some misunderstanding regarding the *Journal*'s policy on polyauthorship. The number of authors listed on a paper is not a factor in the review and acceptance/rejection procedure. However, once a decision has been made to publish a paper, we do apply *Journal* policy regarding the number of authors in the by-line: only principal researchers and writers of articles are listed in the by-line; collaborators who have provided technical and other assistance are acknowledged in a footnote. In papers that list more than 4 people as principal authors, we query the first author to verify that those individuals were substantial contributors to the research or ideas reported. Since certain types of psychiatric research may require multiple workers, we will of course include all of the names in these cases.

l-Alpha-Acetylmethadol (LAAM): Prognostic Considerations

BY RICHARD B. RESNICK, M.D., LOIS ORLIN, M.S.W., GRETCHEN GEYER, ELAINE SCHUYTEN-RESNICK, M.S.W., RICHARD S. KESTENBAUM, PH.D., AND ALFRED M. FREEDMAN, M.D.

The authors studied the responses of 28 adult male volunteers who were openly changed from methadone to l-alpha-acetylmethadol (LAAM) maintenance. They found that patients who had been receiving middle-range doses (50–70 mg) of methadone required a significantly lower mean increase in LAAM than patients who had been receiving either high or low methadone doses and that the patients who accepted LAAM differed significantly from those who did not in MMPI 2-point-code ratings and mean social adjustment scale scores. These findings may provide prognostic indicators for response to LAAM, a possible alternative to methadone.

THE LITERATURE REPORTS that *l*-alpha-acetylmethadol (LAAM) may be an effective alternative to methadone in narcotic substitution therapy. A congener of methadone (1–3), LAAM suppresses abstinence for up to 72 hours and may be administered three times a week, which can satisfy the therapeutic aim of having patients visit clinics less often without adding to the public health problem of diverted methadone. While participating in a 40-week cooperative open-label study of the safety and efficacy of LAAM sponsored by the Special Action Office for Drug Abuse Prevention (SAODAP), we examined nonpharmacological factors that correlated with success in treatment.

In 1952 Fraser and Isbell (4) reported that a single 60-mg oral dose of LAAM alleviated abstinence from morphine for 72 hours in man. In a small double-blind pilot study that corroborated this finding, Jaffe and associates (5) found no significant differences in social adjustment between patients maintained on daily methadone and those maintained on *d*, *l*-alpha-acetylmethadol administered three times a week. In subsequent clinical trials at the Illinois Drug Abuse Program, Chicago, and at New York Medical College, both blind and open studies found comparable ratings of improvement in patients treated with LAAM and those treated with methadone (6–9). These studies also further defined the duration of opiate activity at different doses.

METHOD

Sixty adult male volunteers participated in the study. Inclusion criteria were a history of 2 years' addiction, a minimum of 1 month of methadone maintenance before entering the study, absence of serious medical problems or psychopathology, and signing an informed consent. Baseline and periodic evaluations for all of the patients included EKG, EEG, the Hopkins Symptom Check List-90 (SCL-90), SMA 12/60 (Technikon), urinalysis, and physical, psychiatric, and neurological examinations. An evaluation of psychosocial status was made for all of the patients at baseline. Sixteen of the patients completed MMPIs. Each patient was assigned to a primary therapist for counseling and social services.

Patients were randomly assigned to LAAM or to continue methadone. Patients assigned to LAAM were encouraged to continue on it but were told they could switch back to methadone at any time during the study. LAAM was administered at the clinic 3 days a week (Monday, Wednesday, and Friday), and no take-home medication was permitted. Patients receiving methadone attended the clinic 3 to 6 days a week, in accordance with Food and Drug Administration (FDA) regulations, and received take-home doses for the intervening days.

Pre-study methadone doses ranged from 20–100 mg a day. Twenty-eight patients were assigned to LAAM, which was always started on a Monday at a 1:1 cross-over dose. After the first week, LAAM doses were ad-

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The patients' MMPIs were processed through the courtesy of Roche Psychiatric Service Institute, Inc., Nutley, N.J.

justed for the patient's comfort to a maximum of 100 mg. Assessments of the patients' symptoms and psychosocial functioning were recorded weekly during the first 8 weeks of the study and then monthly. Levels of statistical significance were determined by t tests unless otherwise noted.

RESULTS

Of the 28 patients assigned to LAAM, 20 found it an acceptable or preferable form of treatment (group 1) and 8 reported persistent physical and/or emotional discomfort that led them to return to methadone before the end of the 40-week study (group 2).

Doses

The mean starting dose for group 1 patients was 62.8 mg (range: 20–100 mg). For group 2 patients the mean starting dose was 67.5 mg (range: 30–100 mg). At 3 months' maintenance or termination, whichever occurred first, the mean dose for group 1 was 67.8 mg (50–100 mg) on Mondays and Wednesdays and 81.5 mg (60–110 mg) on Fridays. For group 2 the mean doses were 68.8 mg (30–100 mg) on Mondays and Wednesdays and 80 mg (40–100 mg) on Fridays. These differences were not significant ($p>.10$).

Because direct comparisons of doses showed no differences between groups, we evaluated dose adjustments. All 28 of the patients had problems adjusting to LAAM. All but 1 complained of withdrawal-like symptoms (insomnia, yawning, tearing), usually beginning 48–72 hours after taking the medication. In most instances these complaints were relieved by increasing the Friday dose. Two patients who started at 100 mg of LAAM had their Monday and Wednesday doses decreased by 10 mg and 15 mg; their 100-mg doses were maintained on Fridays. Fifty percent of the patients (14 of 28) requested and received dose increases on Mondays and Wednesdays. Overall, both groups received similar increments.

Comparison of the dose adjustments according to pre-study doses of methadone showed that patients receiving middle-range doses of methadone (50–70 mg) required the fewest and smallest adjustments in their LAAM doses (see table 1). Those who crossed over at lower doses (40 mg or less) required the largest increments, 25–35 mg on Mondays and Wednesdays and 35–50 mg on Fridays. We excluded 6 patients from these calculations: 2 whose 100-mg dose precluded the increases they desired and 4 who terminated in less than 3 weeks—before an optimal, stable dose could be found.

Patients who crossed over at middle-range doses received dose adjustments whose mean differed significantly from the mean dose increment of those who crossed over at lower and higher doses ($p<.01$ and $p<.10$, respectively). The differences were even more significant for the 9 patients in group 1 who had been receiving middle-range doses. None of these patients required an increase on Monday or Wednesday, and 1 required a 10-mg decrease. The 3 middle-range patients in group 2, who were raised 5 mg, 10 mg, and 20 mg, accounted for the mean increase of 1.3 mg (see table 1).

TABLE 1
Adjustments of LAAM Doses Required by 22 Patients Who Crossed Over from Low-, Middle-, or High-Range Doses of Methadone

Item	Range of Methadone Dose Before Crossover (mg)		
	20–40 (N=3)	50–70 (N=12)	75–80 (N=7)
Mean initial LAAM dose (mg)	33.3	57.9	78.6
Mean increase in LAAM dose, Monday and Wednesday (mg)	20.0	1.3	7.1
Mean increase in LAAM dose, Friday (mg)	33.3	15.0	29.3
Mean crossover ratio, Monday and Wednesday	1:1.6	1:1.0	1:1.1
Mean methadone to LAAM ratio, Friday	1:2.0	1:1.3	1:1.4
Range of maintenance LAAM dose, Monday and Wednesday (mg)	50–55	50–70	80–90
Range of maintenance LAAM dose, Friday (mg)	65–70	60–100	90–100

One patient reported severe symptoms suggestive of overdose 4–5 hours after an initial dose of 65 mg of LAAM. These symptoms lasted for 8–12 hours. The patient suffered intense anxiety as a result of this episode. With considerable staff support, however, he continued in the study for an additional 9 days so that we could try to assess the pharmacological and psychological components of his unusual reaction. He agreed to come to the clinic every day and to take LAAM or methadone blindly, but he made it clear that he would discontinue LAAM when we had completed our evaluation. The pharmacist disguised the color and taste of both LAAM and methadone. The patient then received four doses of LAAM (50 mg, 50 mg, 25 mg, and 35 mg) and, on the alternating days, five doses of methadone or placebo (placebo, placebo, 50 mg, 50 mg, and 15 mg). His symptoms abated, and he was unable to distinguish LAAM, methadone, or placebo days.

The apparent and significant ease with which patients crossed over from methadone to LAAM at middle-range doses did not, however, provide a firm basis for prognosis because several patients receiving lower and higher pre-study doses of methadone were also well satisfied after dose adjustments. We therefore explored nonpharmacological variables that might prove more useful in predicting outcome.

Background Information

Among the demographic variables of age, education, race, number of months in methadone maintenance, and number of years of opiate addiction, only years of opiate addiction differed significantly between

TABLE 2
Distribution of Number of Years Addicted Among 20 Patients Who Accepted LAAM (Group 1) and 8 Who Did Not (Group 2)

Number of Years Addicted	Group 1		Group 2	
	Number	Percent	Number	Percent
2–6	10	50.0	7	87.5
7–11	6	30.0	1	12.5
12–20	4	20.0	0	—

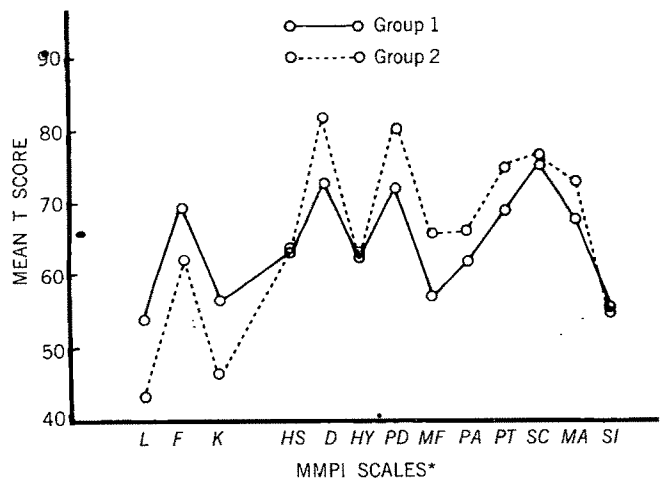
groups 1 and 2 ($p<.05$). In group 1 the mean was 7.9 years (range, 2–21), and in group 2 it was 4.5 years (range, 3–8). The number of years of addiction, when distributed into ranges of 2–6, 7–11, and 12–20 years, showed a trend for group 2 to have a shorter addiction history; this trend was not statistically significant (see table 2).

MMPI Scores

Eleven of the 20 patients in group 1 and 5 of the 8 patients in group 2 completed the MMPI. The patients in group 2 tended to show more deviant profiles than those in group 1 (see figure 1). In comparing clinical and validity scales for the two groups, the largest differences were in the mean scores for depression and psychopathic deviate, although none of these differences was statistically significant.

Each patient was rated on his two most elevated scales using a 2-point code (10). The 2-point code for 5 patients in group 2 included the depression, psychopathic deviate, and schizophrenia scales. Eight patients in group 1 had 2-point codes that included all of the clinical scales except paranoia and social participation; the other 3 patients in group 1 had the same 2-point codes as those in group 2. This difference in the 2-point code ratings between the acceptor and nonacceptor groups was statistically significant ($\chi^2=4.65$, $p<.05$).

FIGURE 1
Mean MMPI Scores of 11 Patients Who Accepted LAAM (Group 1) and 5 Who Did Not (Group 2)



*L=lie; F=validity; K=attitude; Hs=hypochondriasis; D=depression; Hy=hysteria; Pd=psychopathic deviate; Mf=masculinity-femininity; Pa=paranoia; Pt=psychasthenia; Sc=schizophrenia; Ma=hypomania; and Si=social participation.

Social Adjustment

Our impressions of the two groups suggested that the patients in group 1 had better psychosocial adjustments than those in group 2, so we rated each patient on a five-item social adjustment scale, using the following categories: employment, illegal activity, drug abuse, familial relationship, and treatment involvement. Each patient was rated as zero or plus for each of these items.

A plus rating for employment was given only for a verified, full-time salaried job or school attendance. A plus rating for illegal activity was given only if the patient was not known to be engaged in illegal activity for profit. A plus rating for drug abuse was given only if the patient met two criteria: he did not frequently (two or more times a week) appear to be high when seen at the clinic (on the basis of staff consensus, irrespective of what substance he used), and he denied using any illicit opioid drug (this had to be corroborated by urinalysis). A plus rating for familial relationship was given only if the patient was living with his spouse or a member of his primary family and the spouse or relative was not abusing drugs. A plus rating for treatment involvement was given only if the patient asserted that he trusted his counselor and that he found the weekly contacts to be helpful.

Group 1 social adjustment scores (mean, 3.75) were significantly higher than scores for group 2 (mean, 1.37) ($p<.01$). Eighteen of the 20 patients in group 1 had a general score of 3–5, compared with 7 of 8 patients in group 2 who had scores of 0–2. This distribution of the scores between the two groups was also significant ($\chi_2=12.38$, $p<.01$).

Patients who acknowledged their use of illicit drugs to their counselors were not given a zero rating for drug abuse unless they were using illicit opiates or were abusing drugs to the extent that they usually appeared high. Of the 11 patients who were assigned a zero rating for drug abuse, 9 acknowledged the substances they were abusing, which included heroin, methadone, barbiturates, diazepam, propoxyphene, amitriptyline, and alcohol, and 2 denied abusing drugs (except for marijuana).

The 11 patients who were rated plus for familial relationship were living with their common-law or legal wives, their siblings, or their parents. Five married patients (all in group 2) received zero ratings, 4 because their wives were known to be opiate abusers and 1 because he claimed that his wife did not know he was opiate dependent or in a treatment program.

Each of the five items of the social adjustment scale was analyzed separately. Absence of illegal activity had the highest individual correlation with acceptance

of LAAM (.73); drug abuse was second (.62) ($p<.01$). The multiple correlation between these two variables and acceptance of LAAM was .74. The other three items—treatment involvement, familial relationship, and employment—were not significantly correlated with LAAM acceptance. The multiple correlation between the combined ratings of illegal activity and drug abuse and the combined ratings of the other three items with LAAM acceptance was .73.

Terminations

All of the patients in group 2 terminated from the study, 4 within 3 weeks and 4 between 14 and 31 weeks. Those who remained in the study longer had vague, intermittent, nonspecific complaints throughout; they attributed these to LAAM. Four patients in group 1 were terminated from LAAM: 2 for medical reasons unrelated to the medication and 2 after their arrest on warrants several years old.

DISCUSSION

Dosage and Side Effects

The range of doses in our LAAM patients (50–100 mg) corresponds to those reported in other studies. Our mean dose adjustment on Friday of 1.3 mg of LAAM for every 1 mg of methadone is identical to the conversion ratio required in a study in which LAAM was blindly substituted on weekends for 40–70 mg of methadone daily (7).

The pharmacological basis for side effects and acceptability to patients is always difficult to evaluate when medication is changed openly and without controls. In double-blind studies in which LAAM was compared with methadone, no differences were observed or reported in either subjective experiences or acceptability to patients (5–7). Three of us (L.O., G.G., and E.S-R.) were involved as counselors and evaluators in an earlier study at this facility in which LAAM was openly administered to detoxified heroin addicts (8). Both low doses (40–50 mg) and high doses (80 mg) of LAAM given three times a week were well tolerated for 6 months of treatment, and evaluations of the patients receiving LAAM were equivalent to those of a control group receiving 100 mg of methadone a day in terms of patient acceptance and withdrawal symptoms, although minor side effects were more prevalent in the LAAM group.

In our current study, the results suggest that difficulties adjusting to LAAM were not due to specific pharmacological actions. Initially, most of the patients expressed apprehension that the medication might not "hold" them. For many of the patients, these anxieties were relieved after starting LAAM. Two chronically complaining patients received LAAM blind with placebo methadone on alternate days. In both cases their complaints subsided. Our evaluation of the patients whose anxieties were not relieved concurs with the impression of Jaffe and associates (6, 7), who suggested that anxiety reactions are largely psychogenic in origin and that the patient's attitude is more powerful than drug differences.

The impression that nonacceptance of LAAM is a primarily psychogenic reaction is consistent with our previous experience with 10 hospitalized patients, detoxified from opiates, who volunteered to try a "new" form of methadone called "Fioridol," which was, in fact, red-colored methadone (11). All 10 patients reported a range of symptoms (sweating, nausea, headaches, sleeplessness, anxiety) that were not unlike the chronic complaints of our patients in group 2. The patients attributed these symptoms to the medication. Because this study was open and completely supported by the staff, it is unlikely that the patients' reactions were influenced by staff attitude. When "Fioridol" was discontinued and patients were told they were getting regular methadone, their symptoms disappeared.

MMPI Considerations

The profile of mean scores of our LAAM patients matches profiles described by other investigators for populations of opiate addicts (12–15) and includes the elevated depression and psychopathic deviate scores reported to be significant MMPI differentiators of addict and nonaddict populations (13).

The patients in group 2 showed more deviant scores on 6 of the 10 clinical scales, although this difference was not statistically significant. A similar tendency in MMPI scores toward more severe psychopathology has been reported to differentiate successful from unsuccessful methadone maintenance patients (14). Group 2 patients also had abnormally low lie and attitude scores, which can indicate exaggeration of emotional problems and create an impression of serious emotional disturbance (15). Von Felsinger and associates (16) related atypical reactions to drugs to degree of emotional disturbance. The trend of the 8 patients in group 2 toward more psychopathology may have affected their reactions to LAAM.

Our finding that the 2-point code significantly differentiated nonacceptors of LAAM suggests that there may be a group of addicts whose high scores on the depression, psychopathic deviate, and schizophrenia scales of the MMPI may be useful as a prognostic index.

Social Adjustment

Our hypothesis that patients' psychosocial adjustment played a role in their acceptance of LAAM is consistent with patterns found by other investigators. In Babst and associates' study of 679 methadone maintenance patients (17), dropouts were more involved in illegal activity and more likely to be multidrug or alcohol abusers, unemployed, and unmarried. Similarly, Williams and Johnston's study of 300 methadone patients (18) found that fewer years of addiction, less involvement with drugs, and being married were positively correlated with treatment program retention rates. Resnick and associates (19, 20) found that

patients who benefited from treatment with cyclazocine were best differentiated from those who did not by having an ongoing, consistent heterosexual relationship.

The one nonaccepting patient in our study who had a high social adjustment score warrants clinical comment. When this patient began methadone treatment 4 years ago, he experienced the same adjustment difficulty as he did with LAAM (i.e., complaints of "not feeling myself," anxiety, and withdrawal-like symptoms). He continued in treatment despite his discomfort because no alternative medication was available. Eventually his symptoms disappeared. This patient has a typical obsessive-compulsive personality with somatic preoccupation. Characteristically, he reacts with somatic symptoms to any deviation from what he is accustomed to but blames his discomfort on his medication. Environmental changes may contribute to placebo reactions (21) and further explain this patient's response. We believe that this patient would have adjusted satisfactorily if no other treatment choice had been available.

Terminations

Throughout the study, we observed that staff concern and support were critical in retaining patients receiving LAAM, particularly during the early stages. Patients who responded to staff support adjusted more easily to the new medication. We believe these patients tolerated some initial discomfort because they trusted our assertions that they would feel better. This response is consistent with the role of positive transference to a therapist in counteracting negative placebo reactions (22). It is also consistent with greater psychosocial adjustment.

Three of the 4 "quick" terminators in group 2 had no treatment relationship with their therapists, but 3 of the 4 who terminated later had positive therapist relationships. These late terminators chronically complained about the medication. In our opinion, they would not have been retained for so long without positive therapeutic relationships. In other work with patients in treatment for opiate dependence, we have found that good rapport and positive transference to a therapist means a greater likelihood of remaining in treatment (23).

Implications for Treatment

In addition to assuaging the public health problems created by methadone diversion (24–26), LAAM maintenance may benefit patients by decreasing their preoccupation with medication. For example, 1 of the patients in this study stated, "For the first time in 10 years, I woke up and did not have to reach for methadone or go and get something to make me feel normal. I felt like a human being." Other patients saw the change to LAAM as an opportunity to lessen their dependence on methadone and as a useful transition toward their eventual goal of being drug free. Some viewed LAAM as a medication distinct from methadone, which they felt was only a legal fix. Patients preoccupied with their daily methadone, on the other hand, may experience deprivation from LAAM's delayed and more gradual action. We have observed that such patients frequently have limited involvement outside the drug culture and often desire opiate effects from their methadone.

Should the SAODAP cooperative studies show that LAAM is comparable to methadone in safety and efficacy and it becomes more widely available for treatment, we recommend that both drugs be administered under supervision. We believe that LAAM will be more appealing and acceptable to patients if their choice is limited to either LAAM three times a week or daily clinic attendance for methadone.

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BRIEF COMMUNICATIONS

Penfluridol in the Treatment of Newly Admitted Schizophrenic Patients in a Brief Therapy Unit

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The authors compared penfluridol, a long-acting neuroleptic that can be administered orally once a week, with chlorpromazine in the treatment of 33 newly admitted schizophrenic patients in a brief therapy unit. Patients receiving either drug improved enough to be discharged in 3 weeks. Penfluridol-treated patients experienced less drowsiness than those treated with chlorpromazine, but the severity of extrapyramidal symptoms appeared to be greater with penfluridol.

LONG-ACTING NEUROLEPTIC DRUGS constitute a major advance in the treatment of schizophrenic patients because they can reduce the total amount of antipsychotic drug prescribed, minimize absorption variability, and overcome the major problem of noncompliance. Penfluridol, a diphenylbutylpiperidine, chemically designated as 4-(4-chloro-α,α,α-trifluoro-m-tolyl)-1-(4,4-bis(p-fluorophenyl)butyl)-4-piperidinol, is the first neuroleptic introduced that can be administered orally once a week. Penfluridol was found by Gallant and associates (1) to be superior to placebo in the treatment of chronic schizophrenic patients, confirming results from earlier European studies. The present study was designed to compare penfluridol with chlorpromazine in the treatment of newly admitted schizophrenic patients in a brief therapy unit.

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METHOD

A total of 33 newly admitted schizophrenic patients who satisfied study criteria similar to those used in the National Institute of Mental Health–Psychopharmacology Service Center (NIMH–PSC) collaborative study (2) were selected from the Allan Memorial Institute Brief Therapy Unit for inclusion in the study. Patients entered the study as they became available at the brief therapy unit, where they were admitted for a 3-week period and then discharged. All patients needed admission, and none had received long-acting neuroleptics for at least 2 weeks before the study. A 10-week follow-up of these patients will be reported in a later paper.

The patients were assigned to one of two evaluating psychiatrists in such a way that each psychiatrist evaluated a group that included both male and female patients, permitting the examination of a possible sex effect. Individuals in each group were randomly assigned to one of the two drug treatments, penfluridol or chlorpromazine, which were administered under double-blind conditions. The penfluridol dose schedule was a single dose of 40 mg the first week, 80 mg the second week, and 120 mg the third week. The chlorpromazine schedule was 300 mg a day during the first week, 600 mg a day the second week, and 900 mg a day during the third week. It was necessary to reduce the dosage for only 1 patient during the study. This patient, who was receiving chlorpromazine, had the dosage reduced after 10 days of treatment.

Of the 33 patients initially included in the study, 4 patients, all in the chlorpromazine group, were dropped and excluded from statistical analysis because they did not remain in the study for a sufficient length of time. Three of these patients developed systemic allergic reactions with edema and dermatitis,

TABLE 1
Allocation of 29 Patients to Penfluridol or Chlorpromazine, by Psychiatric Evaluator

Item	Penfluridol Patients (N=14)		Chlorpromazine Patients (N=15)		Total
	Men	Women	Men	Women	
Evaluator 1	4	3	4	4	15
Evaluator 2	4	3	3	4	14

and the fourth patient became severely agitated and could not be controlled by supplementary medication. Table 1 shows the final distribution of the 29 remaining patients to treatments. All patients, or their relatives, gave informed consent after the purpose of the study and the possible side effects were explained.

Use of supplementary medication was permitted on ethical grounds. However, it was administered only in cases of severe agitation, always followed consensus decision among the psychiatrists and nurses, and was discontinued as early as possible. Only chlorpromazine was used as adjunctive medication; it was administered by mouth in liquid form to minimize variability of absorption.

Assessment of symptoms was based on clinical interviews conducted by one of the two psychiatrists, the same psychiatrist always evaluating the same group of patients. The mental status of patients was scored before treatment and at the end of week 3 on the Inpatient Multidimensional Psychiatric Scale (IMPS) (3), the Brief Psychiatric Rating Scale (BPRS) (4), and a 7-point clinical global impression (CGI) of severity of illness. Laboratory tests and EKGs were carried out at the same time periods.

The final experimental group consisted of 29 patients, 15 men and 14 women, ranging in age from 19 to 60 years (mean 35.7, standard deviation 12.6, median 35). The mean age of the patients assigned to penfluridol treatment (34.6) did not differ significantly ($p>.05$) from that of patients assigned to chlorpromazine (36.6). Nine patients in the penfluridol group and 9 in the chlorpromazine group had a history of schizophrenia. Six penfluridol and 9 chlorpromazine patients had been hospitalized previously for short periods of time, but in no case did the total duration of previous hospitalizations exceed 1 year. Patients were classified as paranoid or nonparanoid according to the criteria of *DSM-II* (5) and as acute or chronic depending on the absence or presence of residual symptoms for at least 1 year before the current episode. Twenty-four patients (13 receiving chlorpromazine, 11 receiving penfluridol) were classified as acute, and 5 patients (2 receiving chlorpromazine, 3 receiving penfluridol) were classified as chronic. Seventeen patients (11 receiving chlorpromazine, 6 receiving penfluridol) were classified as paranoid, and 12 patients (4 receiving chlorpromazine, 8 receiving penfluridol) were classified as nonparanoid.

RESULTS

Results on each measure were subject to 2^3 factorial analysis of covariance, with drug treatment, patient's sex, and evaluating psychiatrist as factors and initial scores as covariate.[1] Table 2 lists the initial mean scores and, when appropriate, the adjusted final mean scores at week 3 on each measure. Results were considered statistically significant if they reached a .05 level of probability. Significant heterogeneity of covariate regression was limited to five measures; the unadjusted final mean scores for these measures are given in table 2. Lack of statistically significant drug × sex interaction on any measure suggests that the results are applicable to patients of either sex. Results on each measure (apart from the BPRS guilt feelings item) were also free from any of the other possible first- or second-order interactions (drug × evaluator, evaluator × sex, and drug × evaluator × sex).

Global Measures

According to scores on the CGI severity of illness scale, the total BPRS, and the total IMPS, patients receiving both treatments had highly significant reductions in psychopathology during the 3-week period ($p<.001$); all of the patients terminated the inpatient phase of the study with symptoms sufficiently reduced to enable their discharge.

The CGI severity of illness scale showed no significant difference between the adjusted mean score of patients treated with penfluridol and that of patients treated with chlorpromazine. Analysis of the BPRS and IMPS total scores indicated that the regression slope of final score on initial score for penfluridol-treated patients differed significantly from that of chlorpromazine-treated patients. Because this heterogeneity of covariate regression invalidates the use of the standard analysis of covariance based on a pooled slope, separate regression lines were fitted for the two treatments, and the range of initial scores for which there was a significant difference between the therapeutic outcomes of patients in the two treatment groups was calculated in the way Klein and Rosen calculated it (7). Further details of the statistical technique were given by Li (8).

According to both the BPRS and IMPS total scores, penfluridol was found to be significantly superior to chlorpromazine for patients with relatively low initial scores (for BPRS, initial score of 33 or less; for IMPS, initial score of 242 or less), and chlorpromazine was found to be significantly superior to penfluridol for patients with relatively high initial scores (for BPRS, initial score of 57 or more; for IMPS, initial score of

[1]Because the data contained unequal cell numbers (see table 1), analyses of covariance were carried out using a program for multiple linear regression (main effects were estimated disregarding interactions, and then interactions were estimated after adjusting for main effects) (6, pp. 441–450). In each analysis the homogeneity of the separate treatment regressions of final score on covariate was tested (6, pp. 430–436).

TABLE 2
Initial and Adjusted Final Mean Scores of 29 Patients Given Penfluridol or Chlorpromazine on IMPS Factors, BPRS Items and Factors, and CGI Severity of Illness Scale

Item	Penfluridol Patients (N=14)		Chlorpromazine Patients (N=15)	
	Initial Mean Score	Adjusted Final Mean Score	Initial Mean Score	Adjusted Final Mean Score
IMPS factors				
Excitement	17.2	11.9	16.9	10.5
Hostile belligerence	18.1	9.2	17.6	9.0
Paranoid projection	76.0	54.6	68.5	50.7
Grandiose expansiveness	34.8	29.4	35.5	28.1
Perceptual distortion	28.0	20.6	31.9	19.4
Anxious intropunitiveness	29.9	24.9	26.8	24.7
Retardation and apathy	19.9	13.5	17.1	12.0
Disorientation	12.0	12.0	11.7	12.0
Motor disturbances	24.5	14.8	20.3	15.5
Conceptual disorganization	11.2	7.1	10.9	7.1
Total	286.0	206.4*	272.1	194.1*
BPRS items				
Somatic concern	3.4	1.5	2.3	1.8
Anxiety	3.4	2.1	3.5	2.1
Emotional withdrawal	2.8	2.3	2.7	1.8
Conceptual disorganization	2.6	1.1	2.6	1.3
Guilt feelings	1.8	1.3**	2.1	1.0**
Tension	3.2	1.8	3.0	2.1
Mannerisms and posturing	2.4	1.3	1.9	1.3
Grandiosity	3.2	1.2	2.8	1.5
Depressive mood	2.0	1.4	2.1	1.4
Hostility	1.8	1.1*	2.3	1.1*
Suspiciousness	3.3	1.7	4.0	1.3
Hallucinatory behavior	3.9	1.6*	4.8	1.5*
Motor retardation	1.6	1.8	1.4	1.2
Uncooperativeness	1.6	1.0	1.9	1.4
Unusual thought content	4.6	1.4	4.7	1.9
Blunted affect	1.8	1.8	1.9	1.5
Excitement	1.9	1.3	1.7	1.1
Disorientation	1.5	1.0	1.3	1.1
Total	46.9	26.9*	47.3	26.3*
BPRS factors				
Thinking disturbance	11.1	4.2	12.1	4.8
Hostile suspiciousness	6.7	3.8	8.3	3.9
Withdrawal-retardation	6.2	5.8	6.0	4.4
Anxious depression	7.2	4.8	7.8	4.5
Schizophrenic score	17.4	10.0	18.1	9.2
CGI severity of illness scale	5.1	2.8	5.5	3.0

*Significant heterogeneity of regression. Final means are given instead of adjusted final means.
**Significant heterogeneity of regression. Final means are given instead of adjusted final means. Significant drug × evaluator interaction, attributable to unusually low variability because all patients except 2 did not have this symptom when they terminated the study.

282 or more). For patients with initial BPRS and IMPS total scores within these limits (for BPRS, between 33 and 57; for IMPS, between 242 and 282) (the majority of patients in our sample), no significant difference could be detected between the performances of the two drugs on these measures. It should be noted that the same tendency was apparent on the CGI severity of illness scale, but heterogeneity of covariate regression did not reach statistical significance on that measure.

Rating Scale Items and Factors

No significant differences could be detected between the mean outcomes of penfluridol- and chlorpromazine-treated patients on any of the individual BPRS items and factors or IMPS factors.

Supplementary Medication

Twelve of the 14 patients in the penfluridol group and 12 of the 15 patients in the chlorpromazine group required at least one dose of supplementary medication during the 3-week inpatient phase of the study. The mean daily dose of supplementary chlorpromazine received by penfluridol patients (66.0 mg) did not differ significantly from that received by chlorpromazine patients (33.7 mg).

Side Effects

Nine penfluridol patients exhibited extrapyramidal symptoms that required at least one dose of antiparkinsonian medication (procyclidine hydrochloride), compared with 8 patients in the chlorpromazine group. Among these patients the extrapyramidal symptoms were considered to be severe in 6 of the penfluridol-treated group but in only 2 of the chlorpromazine group ($p<.10$, Fisher exact probability test). However, the mean daily dose of antiparkinsonian drug received by penfluridol patients (4.1 mg) was not significantly greater than that required by chlorpromazine patients (2.9 mg). Antiparkinsonian medication was not given prophylactically, and decisions about its administration were always made by the same psychiatrist.

Moderate or severe drowsiness was experienced by significantly more patients receiving chlorpromazine (7 patients) than by patients receiving penfluridol (1 patient). There were no other significant differences among the side effects induced by the two treatments. Adverse reactions were generally mild in nature; no special measures were required for their relief. Laboratory tests (SMA-12), hematological tests, and urinalysis were all within normal limits. There were more T-wave changes with chlorpromazine than with penfluridol; this will be reported in detail in a later paper. Table 3 gives details of the incidence of side effects among the patients.

DISCUSSION

Our results appear to confirm Chien and Cole's findings (9) that long-acting antipsychotic drugs can constitute an efficacious treatment for newly admitted schizophrenic patients. The brief therapy unit was especially chosen for this study so that the relative efficacy of penfluridol could be evaluated in a short-term hospitalization setting, the main advantage of which is that the patient can be returned quickly to the community after having been stabilized by the administration of a long-acting drug.

Penfluridol appeared to differ from chlorpromazine

TABLE 3
Symptoms Seen During Weeks 1–3 in Patients Given Penfluridol or Chlorpromazine

Symptom	Penfluridol Patients (N=14)			Chlorpromazine Patients (N=15)		
	Degree of Severity			Degree of Severity		
	Mild	Moderate	Severe	Mild	Moderate	Severe
Behavioral toxicity						
Insomnia	13	0	0	15	0	0
Drowsiness	1	0	1	1	3	4
Neurological						
Rigidity	0	2	2	0	2	2
Tremor	0	1	2	0	4	0
Dystonic symptoms	0	1	2	0	1	0
Akathisia	0	1	0	0	1	0
Autonomic						
Dry mouth	0	0	0	0	2	1
Increased salivation	0	1	0	0	0	0
Constipation	5	0	1	3	3	0
Cardiovascular						
Dizziness	0	0	0	1	0	0
Other						
Systemic allergic reaction	0	0	0	0	0	3*
Tardive dyskinesia	0	1	0	0	0	0
Heartburn	0	0	0	1	0	0

*Refers to 3 patients dropped from study.

in its therapeutic effect in that it was less effective with patients with more acute symptoms. For the treatment of less acutely ill patients, however, penfluridol seemed to be at least as beneficial as chlorpromazine. There was some suggestion that the severity of extrapyramidal symptoms may be greater with penfluridol than with chlorpromazine, but penfluridol-treated patients experienced significantly less drowsiness than those treated with chlorpromazine.

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A Favorable Response to Lithium Carbonate in a "Schizo-Affective" Father and Son

BY DAVID E. REISER, M.D., AND ALLAN BROCK WILLETT, M.D.

It has recently been suggested that patients with mania are often misdiagnosed as having schizophrenia. The authors report a favorable clinical response to lithium carbonate in a father and son with an apparent schizo-affective disorder. They conclude that some patients with schizo-affective syndromes may respond favorably to lithium but caution that a favorable response in such cases does not absolutely confirm a diagnosis of mania.

THE INTRODUCTION of lithium carbonate in the United States has stimulated a resurgence of interest in the diagnosis and treatment of affective disorders. Aside from its efficacy in the treatment of manic episodes, the use of lithium has spawned a reevaluation of current criteria for the differential diagnosis of schizophrenia and manic-depressive illness. Prior to lithium treatment, the differential diagnosis between schizophrenia and mania was of less practical importance because the two conditions were treated similarly. Widely accepted (in the United States at least) diagnostic criteria made the differential diagnosis between the two disorders seem clear cut.

The basis for distinguishing schizophrenia from mania dates back to Kraepelin (1), who emphasized that in mania, unlike in "dementia praecox," chronic deterioration did not occur. More recently an accepted authority (2) underscored the differences between the two psychoses, and other contributors (3) continue to point out these differences, emphasizing early presence of auditory hallucinations, religious ideation, delusions, impaired reality testing, ideas of reference, and later deterioration as indicators of a schizophrenic process. They underscore the importance of formal thought disorder in schizophrenia, stressing that the classic pressured speech of mania is not "loose" but linear and comprehensible.

Since the advent of lithium, however, a growing body of scientific literature has challenged these assertions. Some investigators claim that many subjects initially diagnosed as schizophrenic are later found to be manic-depressive psychotics (4–7). Taylor and Abrams (5) found that auditory hallucinations occurred in 48.1% and persecutory delusions in 42.3% of their manic subjects. Carlson and Goodwin (6) emphasized that loose associations could be documented in many manic patients, thus challenging the traditional view that true loosening of associations is pathognomonic of schizophrenia.

Other diagnostic indicators of schizophrenia are also being questioned. A study of patients diagnosed as having catatonic schizophrenia concluded that many were manic (8). Conversely, 25% of a cohort of manic-depressive patients were found to display Schneider's first-rank symptoms of schizophrenia (9).

Because of this shift in diagnostic thinking, the high familial incidence of manic-depressive psychosis, and a favorable report on the use of lithium to treat hyperactive children of lithium-responding parents, we treated with lithium carbonate a patient with apparent schizo-affective psychotic decompensation whose father had previously responded to lithium therapy (10).

CASE REPORTS

Case 1. Mr. B was born in rural Colorado in 1912, the eldest of 10 children. His father was described as quiet and even-tempered. His mother, however, was very active and "high strung and outspoken," with periods when she would "talk and talk," accompanied by bursts of intense activity. "When she got going, people half her age couldn't keep up." (Mr. B recalls no interspersed episodes of depression.) His maternal grandfather died in a state hospital following a 10-year history of grandiose efforts to make millions selling common glass stones, but there was no history of major mental illness in his 9 younger siblings.

Mr. B manifested no severe behavioral or emotional problems during childhood, but early displayed a propensity toward depression. He was highly perfectionistic and recalls being "down in the dumps for days" after "failures" such as a low grade in school. He always felt inferior to his younger siblings. During high school he continued to be sensitive to rejection and "failure." After graduation he worked as a baker and eventually owned his own shop. At 24 he married his current wife; they had 3 children in the next 8 years, and with hard work they managed well financially and socially.

When he was 44 (in 1956) Mr. B lost over $10,000 in real estate speculation. He subsequently became irritable and depressed and was hospitalized at a state hospital, where he was diagnosed as suffering from paranoid schizophrenia. He

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improved after 24 ECT treatments over a 6-month period. Mr. B's wife recalled that he had changed after his mother died. He began to squander money recklessly and finally left home on a "wild spending spree" that culminated in the loss of their diligently acquired savings. After discharge he returned to construction work without any demonstrable deterioration in his thinking, object relations, or job performance.

In 1963 (age 51) he was placed on chlorpromazine (Thorazine) for irritability and temper outbursts but refused to take it regularly. Over the next year he showed extreme agitation and expressed hatred for many people. He threatened a large bakery with a suit for putting coal oil in a loaf of bread. His bickering and grandiosity increased after his father's death until his wife obtained a court order for his hospitalization. At this time (1964) he displayed a mixture of manic and schizophreniform features. He had motor hyperactivity, rapid speech, flight of ideas, his mood fluctuated from "comical and joking" to "depressed with tears," and he was angry and vulgar. Schizophreniform symptoms included loose, literal, and personalized proverb interpretations and a systematized paranoid delusion that a large bakery had deliberately poisoned his bread. He was guarded and suspicious, and had flat affect.

After treatment with phenothiazines was begun his symptoms diminished, and he was able to return to work in 5 weeks. The diagnosis was paranoid schizophrenia. Over the following year, he did not keep outpatient appointments and stopped taking his medication.

A year and one-half later (1966) Mr. B became irritable and argumentative. His distraught wife took an overdose of chlorpromazine, which Mr. B interpreted as a trick to get him into the hospital. In spite of his belief that his wife and her family were out to get him, he consented to voluntary hospitalization. During this hospitalization there were fewer manic elements; hyperactivity was not noted and pressured speech was observed only transiently. Schizophreniform symptoms were more conspicuous. While in the emergency room he insisted that there were listening devices all about. His associations were loose, religiosity was prominent, and he had marked somatic delusions. He was treated with phenothiazines and small doses of imipramine (75 mg/day) and was discharged after 5 weeks, again with a diagnosis of chronic paranoid schizophrenia. He was followed sporadically for the next 5½ years.

Shortly after the death in 1971 of a chronically ill sister, Mr. B became hyperactive, jocular, used profanity uncharacteristically, and drank excessively. He again squandered money. He was admitted again by court order with pressured speech, loose associations, and impaired abstraction of proverbs and similarities. In family meetings he showed bellicosity, flight of ideas, and hyperactivity.

A trial of lithium carbonate was then initiated. Mr. B quickly became more thoughtful, quiet, and appropriate. Family meetings were reinstituted and he returned to work. After 4 weeks in the hospital he was discharged on 900 mg of lithium carbonate per day.

He functioned stably for the next 1½ years, when lithium was stopped and he was put on low doses of chlorpromazine. During the next 3 or 4 weeks he became more expansive, insomnic, hyperactive, and grandiose; these symptoms led to a fifth hospitalization for 2 weeks in the spring of 1973. There was no evidence of a schizophrenic thought disorder during this admission and prominent manic behavior diminished when lithium carbonate treatment was reinstituted. He has remained stable since then.

Case 2. Jim B was the youngest of 3 children born to Mr. B. His older siblings have adjusted successfully to adult life. Although Jim manifested no severe behavioral or emotional disturbances during childhood, both parents noted that he was a very sensitive child who set impossibly high goals for himself, only to feel crushed when he failed. "Just like his father," his mother commented. After minor academic defeats he would be depressed for days. His object relations during childhood and adolescence were generally unremarkable, but he preferred having a few good friends to many. Jim was 12 when his father was first hospitalized. Throughout his childhood, he felt that his father cared less for him than for his other children.

Jim B completed high school with no major academic or social difficulties. However, he floundered academically on separation from home and failed out of college after one semester. A year later he "pulled together" and later completed college with good grades.

Jim B was first hospitalized at the age of 24. He was preoccupied with marital incompatibilities, which he blamed on his wife of 3 months, a recent dismissal from his first teaching job, and the threat of induction into the armed services.

He was first seen in the emergency room in September 1968, complaining of confusion, depression, and agitation. He exhibited both affective and schizophreniform clinical features. Manic elements included pressured speech and excessive talkativeness. He actively sought out relationships with both patients and staff, and the staff generally responded to him as likeable, although he demanded much attention and had a dependent quality. He was grandiose and expressed plans to write music in order to make millions of dollars and build a plush mansion devoted to music. Schizophreniform symptoms included visual and auditory hallucinations, delusions of grandeur, and the delusion that he was fused with God. He was suspicious and often felt persecuted. He also complained of feelings of unreality. The admitting resident described loose associations, and flat affect and depression were also noted. He was diagnosed as having schizophrenia, paranoid type, and started on phenothiazines. The acute psychotic symptoms remitted very rapidly and within 6 days he discharged himself from the hospital against staff advice without provisions for follow-up.

For the next 5 years Jim B worked at several fairly menial jobs, which he often lost after flare-ups with older male bosses. Although he had a "hot temper," he and his wife had many friends. She stated that Jim was well-liked, affable, easy to talk to, and "very outgoing."

His second psychotic break began precipitously in late November 1973 (age 30). He had been accepted to a high-level trainee position with a life insurance firm but was then rejected because of his prior psychiatric hospitalization. He became morose, increasingly bitter, and then sleepless and restless, with incessant pacing and moving. On December 8, 1973, he impulsively flew with his wife to Los Angeles. On the plane he was expansive and grandiose, referring to himself as a conductor of genius. When a stewardess asked him to keep his voice down he exploded angrily that he would sue her and "the whole goddamn airline." A friend who saw him in Los Angeles stated that "he kept talking so fast I couldn't keep up with him." After a day he flew home alone and came to the emergency room requesting rest and recuperation "to get my thoughts together."

One of us (D.E.R.) evaluated his mental status the morning after admission. He was disheveled and unkempt in a seclusion room and threatened to leave the hospital. His eyes had a wild expression but his affect was very flat—he dis-

played no euphoria and was emotionally remote. His body habitus was tense and guarded. Proverb interpretations were elicited; he abstracted simple proverbs fairly well, but more difficult ones evoked literal responses and loose associations.

When asked to explain his troubles, Jim drew an intricate graph of "mental balance." The graph was complex, meticulously executed, and full of cryptic detail. It resembled the typical overwrought and excessively symbolized diagrams drawn by paranoid schizophrenics. He interpreted his drawing with loose associations and a remote, emotionally flat tone of voice, although the content of the diagram dealt with emotional states. There were vectors for "too high" and "too down." The ideal place Jim B envisioned for himself was "in the middle."

He was diagnosed as a chronic schizophrenic, paranoid type, in acute exacerbation, and started on haloperidol. As hospitalization continued manic features appeared. Excessive attention-seeking, grandiosity, motor hyperactivity, and pressured speech were observed. His speech was filled with sexual themes. He offered to "buy a new hospital with the millions I'm going to make." However, frequent tearfulness, sleep and appetite disturbances, and complaints of depression were also noted. Schizophreniform features included loose associations, religiosity, paranoid trends, somatic delusions (e.g., "God has entered my body"), and hallucinations. A consultant underscored his interpersonal remoteness and flat affect and felt a formal thought process disorder was present. After a week he was less agitated and delusional, but continued to be aloof and arrogant, becoming unpredictably "loose" and excessively anxious.

He was started on lithium carbonate and haloperidol was discontinued. As soon as serum lithium levels reached therapeutic ranges he became dramatically less angry and upset. Appropriate socialization on the ward increased markedly. He found an apartment with a former friend (his wife had divorced him during the hospitalization) and a job.

Jim B is currently employed as a bus driver and has remarried. He and his wife expect their first child shortly. They have an active social life and, for the first time, he is on cordial terms with his father.

DISCUSSION

We believe that these cases corroborate recent findings that many schizophrenia-like syndromes respond favorably to lithium when there is a coexisting affective disturbance. The presence of traditionally schizophreniform symptoms does not preclude a favorable response to lithium. A therapeutic trial of lithium should be considered whenever the basic triad of manic symptoms is confounded by a schizophrenic picture.

The question of what is the most accurate diagnosis in these cases inevitably arises. Factors to be considered include the symptom picture, familial (hereditary) data, natural course of illness, and drug response.

In these two cases the family history strongly suggests transmission of an inherited mental disorder with a major manic component from generation to generation, dating back (at least) to Mr. B's great-grandfather (four generations).

The natural courses of the illnesses of these two men have both important similarities and differences. Both showed signs of narcissistic vulnerability, perfectionism, early academic disappointment, feelings of inadequacy, and job failure in young adulthood. Finally, both experienced recurrent psychotic episodes with a mixture of cognitive and affective symptoms. Both have displayed little deterioration over time, although we consider Jim B's illness too short to rule this out.

On the other hand, Jim's first episode of psychosis occurred at a much younger age (24) than his father's (age 44). Mr. B's psychoses seemed to be precipitated by deaths (object loss) and Jim's by failure (narcissistic loss). Jim B's early shyness and marital instability may suggest greater difficulty in object relations. Furthermore, his symptom picture has generally included more schizophrenic elements than his father's. However, at certain points in Mr. B's history (e.g., the 1966 episode) a major mistake in diagnosis could have occurred by overfocusing on the symptom picture when schizophreniform symptomatology was prominent.

The most gratifying similarity has been their response to lithium. Those who view mania and schizophrenia as fundamentally different disease processes probably would not have used lithium with Jim B (11–15). We believe that use of differential diagnosis scales, particularly reliance on Schneider's criteria, eliminates a number of potential lithium responders, including this patient (11). The reported propensity for acute organic brain syndromes in "schizo-affective" patients receiving lithium was not observed in either man and we believe that this phenomenon has not been widely confirmed (12, 13).

It is our opinion that there are practical advantages to considering schizophrenia and manic-depressive psychosis on a continuum. One can thus approach the decision to use lithium from a quantitative perspective rather than grappling with a diagnostic either-or dilemma. Although we recognize that potential obfuscation of clear diagnostic thinking could result, we find the theoretical and practical cul-de-sacs of the either-or approach more restrictive. We have adhered to the traditional diagnostic term "schizo-affective" deliberately because we feel it is phenomenologically descriptive and represents the highest level of diagnostic certainty presently obtainable in these types of cases.

A weakness in much recent literature on mania is reliance on post hoc propter hoc reasoning. The argument is: a) the patients presented classic symptoms of schizophrenia, but b) they responded clinically to lithium carbonate. Therefore, c) they are actually manic. Such reasoning may be specious, particularly if the so-called schizo-affective and atypically manic syndromes actually represent points along a unified diagnostic continuum rather than admixtures of two unrelated psychotic entities.

We conclude that many psychotic syndromes with both schizophreniform and affective elements may re-

spond dramatically to lithium carbonate. The relationship between mania and schizophrenia, especially at a neurophysiological and biochemical level, has yet to be clarified.

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Marital Therapy When One Spouse Has a Primary Affective Disorder

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The authors explain why marital disharmony when one spouse has a primary affective disorder is difficult to treat but suggest that such couples can be treated successfully if the therapist is flexible and sets realistic goals. Because of the variability of the disease and the many unsubstantiated etiologies associated with it, the authors recommend a modified general system theory approach to treatment that includes a combination of psychotherapy and somatotherapy.

IN OUR TREATMENT of marital disharmony, a striking group of individuals emerged whose behavior was depressed or hyperactive, sometimes hostile and/or destructive, but whose marriages rarely ended in divorce. It became clear that one of the partners had a manic-depressive illness—now labeled primary affective disorder (PAD). This is the third study of couples with marital disharmony in which one spouse had a PAD (1, 2). (PAD is characterized by alterations of mood, thought, and behavior; this diagnosis has been substantiated by increasing clinical and experimental evidence of a complex psychological and biological etiology [2].) We have found the modified general system theory approach to this problem to be practical because its holistic view enables us to assess and make more effective use of the parts. We also believe our conclusions are important because they are based on years of clinical experience (3, 4).

The sample consisted of 100 upper middle or upper class couples who came for private treatment and/or evaluation from March 1948 to March 1974; 80 couples received therapy. The mean length of observation of the treated couples was 4.92 years (SD = 6.13). There were 100 spouses diagnosed as having a PAD: 40 were classified as unipolar depressive, 18 as unipolar manic,

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and 42 as bipolar. Of the 40 unipolar depressives, 7 were men and 33 were women. Of the 18 unipolar manics, 14 were men and 4 were women, and of the 42 bipolar patients, 10 were men and 32 were women. The difference between men and women based on diagnosis is significant ($\chi^2 = 22.83$, $p < .01$).

Despite considerable strides that have been taken in the past decade to understand and manage the primary affective disorder syndrome, large numbers of patients with an undiagnosed PAD present a challenge to psychiatry. All clinicians need to be aware of the ways in which masked depression or hypomanic-manic states manifest themselves. Recently, Feighner and associates (5) published criteria for diagnosing a PAD. We used most of their criteria in the selection of this sample, but in our experience PAD episodes may vary from one to several days to weeks and even months. In the diagnosis of a PAD we have ruled out other psychiatric syndromes secondary to specific crises and depression and/or mania seen in the course of other psychiatric or neurologic illnesses.

GENERAL SYSTEM THEORY

Our current conceptualization has evolved from the medical model, from the insights furnished by the psychodynamic psychologies, and from the general system theory of von Bertalanffy (6). No one model, whether based on a consideration of intrapsychic dynamics, interpersonal relationships, sociocultural factors, or ideological preferences, can describe the transactions within a marriage. All behavior has meaning and all responses are motivated by internal activities. In addition to this intrapersonal system, every individual has meaningful relationships with others (interpersonal system) and lives in a sociocultural matrix (environmental system). All three systems have open boundaries and contain components in constant transactions of varying intensities. Marital disharmony results when the transactions among these three systems create dysfunctional permutations.

One principle of general system theory, "equifinality," is illustrated in the primary affective disorder syndrome by its multiple precipitating factors (7), i.e., the changing manifestations within an individual or the "switch process" (8) of sequential behavior changes.

Intrapersonal System

We have subdivided the intrapersonal system into two subsystems: psychodynamic and biological. Psychoanalytic formulations provide a good source for hypotheses because of the exhaustive scrutiny of the analytic process. The individual with a PAD is characteristically hypersensitive and hyperreactive. The psychological precipitant, whether real or symbolic, may be so slight as to be overlooked or the resulting reaction so strong that the clinician cannot observe the cause.

Until recently, American psychiatry was strongly influenced by the epigenesists—Freud and Adolf Meyer. Freud (9) warned against assuming general validity for his findings: "some of them [these forms] suggest somatic rather than psychogenic affections." He emphasized the similarity of melancholia to mourning, with the addition of a marked tendency to self-reproach and self-revilement and a fall in self-esteem. Subsequent analysts added metapsychological concepts of orality, ambivalent object relationships, narcissistic trauma, etc. Jacobson, who in 1943 stated that patients with depression are "psychologically identical" (10), changed her position 30 years later (11) to state that they are not psychologically or psychogenetically homogeneous.

Because of the importance of the factor of heredity in PAD, the psychiatrist should attempt to trace the generational course of the disease, not only horizontally among the siblings but also vertically, i.e., back to parents and grandparents and forward to children, regardless of age. In a previous study of this subject (1), we found generational support for the diagnosis of a PAD in 70% of our patients.

Most research is now being directed to the neurophysiologic mechanisms—the so-called biogenic amine model of polarity. A critical assessment of catecholamines and PAD has been published recently by Shopsin and associates (12). However, this hypothesis will continue to be useful until replaced by a more adequate one (e.g., one related to the cholinergic-adrenergic balance).

Interpersonal System

We use the term "interpersonal system" to refer to the relationships among spouses, their children, their extended family, and significant others. The mean years of marriage in our sample was 13.93 (SD = 8.00), and for 77% of the couples it was the first marriage for both spouses.

One of the issues raised in this study was the personality structure of the spouses of the marital dyad. We used two dimensions similar to those used by Eysenck (13)—extroversion-introversion and control-noncontrol. When all 200 spouses were placed in one of the four endpoints of the dimensions, 107 were found to be extroverts, 2 were introverts, 70 were controlling, and 21 were noncontrolling. When these personality dimensions are arranged according to their marital dyadic structure, the overwhelming proportion of dyads (61%) shows an extroverted person married to a controlling one. This strongly suggests that the person with a primary affective disorder consciously and/or unconsciously selects an overcontrolling partner to help cope with the severity of his/her mood swings, whereas the overcontrolled, usually obsessive-compulsive, personality seeks the spontaneity of emotional expression of the PAD personality.

The preponderance of the controlling-extrovert dyad supports the notion of a deep symbiotic attachment that takes place when a PAD spouse is involved and suggests a reason for the low incidence of divorce found in this type of marriage. Jacobson (11) suc-

cinctly describes the way people with a PAD and their spouses cling to each other. Another important psychological factor in the tenacity of these marriages is the shame-guilt bind. A frequent observation in the conscious and even unconscious (dream) material is the non-PAD partner's wish for his/her spouse to drop dead. Another psychological variable relates to negative self-concepts. Of the 11 patients in our sample who divorced, 5 had concrete plans to remarry. We feel the present divorce rate would be even lower if the PAD partner had not had anyone waiting. This reinforces the notion that a deep symbiosis is a major characteristic of this type of marriage.

Environmental System

Because of the open nature of the boundaries among the intrapersonal, interpersonal, and sociocultural systems, transactional processes take place in each system that affect human behavior. One of the special features of a person with a PAD is that his/her boundaries are even more open during a hypomanic or manic episode, when he/she is biochemically primed and supersensitive to family transactions and environmental influences. During such periods the slightest external pressure seems to set off intense internal impulse bombardment. Whether or not the environment acts as a triggering device, very destructive behavior can result once a PAD episode begins. This behavior may involve community agencies—trouble with the police, an employer, or employees. The psychiatrist must at times act as an ombudsman.

TREATMENT

Our clinical experience parallels Murphy and associates' (14) i.e., "marked variability of this disease seems to be one of its most striking features." In our study 66% of the marriages were considered to be intermittently incompatible, i.e., they are stable most of the time but are subjected to periods of uproar when the PAD spouse displays gradual to sudden radical changes in mood, thoughts, and/or behavior. Treatment is designed to bring stability back to the marital system as soon as possible and is frequently accomplished by psychotherapy and/or somatotherapy for the PAD spouse and by psychotherapy for the non-PAD spouse.

In the 66% of the couples with intermittently incompatible marriages, 22% were taught to manage a PAD crisis without the therapist. Another 34% were taught to manage most of the PAD mood swings but at times needed the help of the therapist, who was available when needed. The remaining 10% needed regularly scheduled sessions spaced from several weeks to several months apart, a situation that evolves when a couple does not have enough resources to cope with the behavior of the PAD partner. Stabilization for at least 5 years was reached by 10% of the couples. Another 13% of the couples followed the more traditional pattern of durable incompatibility, and 11% of the marriages ended in divorce.

Before any treatment is undertaken the therapist should be prepared for suicidal emergencies. We found that 64% of the patients with a PAD had suicidal thoughts and 43% had seriously attempted suicide before marital treatment was instituted. Inpatient therapy is mandatory if the patient is suicidal, unless there is concerned social support or the condition clears rapidly on medication.

The more experience we had with this type of marriage, the more we came to emphasize preventive work. Our current practice in premarital counseling is usually to advise against marriage when there is a history of a primary affective disorder. It has been our experience that only 60% of the couples follow this suggestion. Marriage to an individual with a PAD involves serious risks: the deep emotional consequences of suicide attempts or suicide, the strong hereditary component, and the intermittent incompatibility of the marriage are emotionally disturbing not only to the spouses but also to the children.

We do not recommend group therapy for a PAD spouse. Members of the group are not aware of the permeability of the ego boundaries of a person with a PAD and can quickly reinforce behavior destructive to this type of marriage. Frequently, the non-PAD partner feels attacked and misunderstood by the group.

Our lack of success in the psychoanalysis of patients with a PAD has led to a combination of psychoanalytic psychotherapy and somatotherapy as indicated. In 1930 Freud (15) predicted that the hope for the future lay in an organic chemistry or endocrinologic approach to psychosis. Even though this future seemed far off, he recommended that every case of psychosis be studied analytically because he believed that the knowledge thus gained would some day direct chemical therapy.

One of the first issues the psychiatrist must decide upon is whether the patient with primary affective disorder needs medication. Many PAD patients with depression and even hypomania tend to have a self-limiting course without medication. Occasionally the patient may need to be hospitalized. Brief ECT may produce significant changes. Our experience as to prevention with lithium is equivocal, but in most cases there is only moderation of mood and behavior. Frequently the non-PAD partner will express a desire that his spouse stop medication and be his "own self."

We have found it valuable to work with the non-PAD spouse in supportive and/or psychoanalytic psychotherapy. Our basic technique is to turn the non-PAD spouse into an assistant therapist and train him for the task of managing the marital system during a PAD crisis. We find that once the non-PAD partner accepts the fact that much of his/her spouse's behavior arises from genetic and biochemical imbalance, there is greater willingness to cooperate. These sessions with the non-PAD spouse are worthwhile because they tend to break the shame-guilt cycle and enable him/her to mo-

bilize more energy in dealing with the realities of the marriage.

We feel that once the diagnosis of PAD is made, the identified patient and the marriage should be viewed as deserving the same long-term commitment as with diabetes mellitus. Both diseases have many unsubstantiated etiologies, show a bell-shaped curve of intensity, and affect all ages.

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Psychiatrist-Wife-Mother: Some Aspects of Role Integration

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Throughout her professional life the woman who chooses to combine the roles of psychiatrist, wife, and mother may find them not only compatible but complementary. If she can adopt a philosophy of life that permits her to function in these roles, and if those around her support her activities, she can perform with relative ease and proficiency. Her lifestyle must of necessity differ from that of her male colleagues, but differing lifestyles among members of a profession vitalize the field. A broad perspective is desirable, especially in a profession that deals with the emotional and mental lives of people. Married women and mothers afford such a broadened perspective to the field of psychiatry.

THERE IS AN interplay between the private and public lives of every person. Each sector influences the other. A remarkable document, the March 15, 1973, issue of the *Annals of the New York Academy of Sciences* (1) illustrates this point well. In the first section of this monograph, 12 women from different scientific fields (none of them psychiatrists) described their careers. These women emphasized the impact of mar-

This paper grew out of a panel discussion entitled "Psychiatrist-Wife-Mother: Is Serenity Possible?" presented at the 126th annual meeting of the American Psychiatric Association, Honolulu, Hawaii, May 7–11, 1973.

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riage and children on their careers and vice versa throughout this work. A similar document about men does not exist. Men do not write about the combination of marriage, fatherhood, and career—at least not in the scientific literature. Perhaps men feel constrained from discussing such subjects in print; perhaps cultural sanctions do not allow them to do so.

Women are not so restricted, especially in recent years. As women have become more involved in the world outside their homes, they seem anxious to share both the public and private aspects of their lives with each other and with men. For example, the panel discussion on which this paper is based was presented at the annual meeting of the American Psychiatric Association in May of 1973 and was scheduled for 7:45 a.m. on Friday, the final day of the meeting. The typical attendance at any panel scheduled for that time is low—often fewer than a dozen people attend. That morning the room was full; every seat was occupied and people were standing around the periphery of the room and in the hall outside. The discussion was lively because so many in the audience were anxious to share their experiences with the panelists and each other.

This article discusses some of the pertinent themes that emerged in that panel and the ensuing dialogues. The themes involve the interplay among womanhood, marriage, motherhood, and the career of psychiatrist. We will offer some guidelines for maximizing effective performance and satisfaction in these multiple roles.

BASIC PHILOSOPHICAL STANCE

The woman who combines marriage, motherhood, and a professional career needs to adopt a philosophy of life that regards these roles as compatible. She must feel that each role is her right as a creative and talented human being. Mental conflict and ambivalence about this issue will deplete the energy she needs to perform her tasks.

The scientific literature offers very few studies to help her establish a positive philosophy toward her lifestyle. Hoffman (2) recently reviewed the literature and found no articles examining the effects of motherhood on professional career. A few authors described the effects of a professional career on motherhood. One showed that middle- and upper-class women who work in careers by choice tend to be overprotective and oversolicitous of their younger children. This behavior drops out as the children reach adolescence. Hoffman points out that such behavior is more likely to be the result of guilt about working rather than the work itself. Other studies show that high-achieving women have high-achieving sons and daughters. Achievement itself does not guarantee equanimity or happiness, but one study she cites indicates that professional women have greater self-esteem and sense of competence than nonworking mothers. Finally, one study examined the effects of marriage on the professional woman and noted that the married women are less lonely and more comfortable in social relationships than their unmarried counterparts. On balance, then, the very sparse existing literature would seem to favor the combination of roles.

Some careers combine with marriage and motherhood more readily than others—the practice of psychiatry is one of them. The philosophical stance of Western psychiatry supports the position of the professional wife and mother. Its basic tenets encourage each individual to attain maximal self-actualization within his or her lifetime by overcoming personal and cultural repressions. It is likely that the female psychiatrist will incorporate this tenet into her personal philosophy of life. In so doing she will be free to pursue her own self-development, and her excellence as a psychiatrist will be measured in her ability to assist others in the same pursuit. Ideally these others include not only her patients but her friends, colleagues, and the members of her family.

The woman psychiatrist seems particularly concerned about the effects of her career on her marriage and children. A pilot study by the American Psychiatric Association's Task Force on Women illustrated these concerns (3). In the study, 35 male psychiatrists were compared with 35 female psychiatrists, and few differences were found between the two groups except in the area of family-career conflicts. Almost 50% of the women reported concern about combining profession and marriage and profession and motherhood. The men did not report such concern. The women handled their family-career conflict by reducing their career demands, working fewer hours, changing to less strenuous and less time-consuming areas of practice, or giving up the care of their children to a housekeeper or parent. Of the women psychiatrists' 44 children, 22 were born after the women had completed their residency training; only 9 of the men psychiatrists' 32 children were born this late. The women in residency tended to be older than the men and had delayed starting their families. Two-thirds of the children were born after the women were 30 years old. Apparently the women attempted to delay motherhood until the strenuous training years were near an end or completed, at which time they were better able to manipulate their professional commitments to mesh with their domestic lives.

This study illustrates the sensitivity and care with which the female psychiatrist approaches her tasks. She is aware of the interplay among various aspects of her life and plans her life accordingly. Her personal life and work become corroborative experiences. She learns in her psychiatric studies the effects of cultural and emotional deprivation, divorce, poverty, intolerance, destructive hostility, illness, and a host of other pathological psychosocial factors. These are not depersonalized phenomena that she reads or hears about in the media but personal and intimate events in the lives of her patients. She can apply what she learns at work at home. Her most important tool in psychiatry is her ability to form mutually enriching and creative relation-

ships. She can use this talent to enhance her relationships with her husband and children.

The roles intertwine—each enhances her proficiency in the other. Her experiences as wife and mother bring personal and intimate knowledge of life's exigencies to her work with patients. They enrich her professional capacities and add depth to her insight and understanding of human nature. It is important that she share her experiences and observations with her colleagues (4). Psychiatry, which needs the knowledge of its female practitioners, has had little input from women. Many of its theoretical distortions could have been prevented or corrected had women been more active in the field.

With the realization that her roles can enhance and complement each other, the psychiatrist-wife-mother is able to adopt a positive attitude toward her lifestyle and organize her life to function maximally in each of her roles.

EXTERNAL SUPPORT SYSTEM

Organization is the key to the performance of the professional who is also a wife and mother, and the most critical aspect of that organization is the external support system with which she surrounds herself. Family, neighbors, community, colleagues, office and domestic helpers, and patients are all part of the system. It is of interest that the husband-father-psychiatrist must also have a strong external support system to function maximally. While models of such systems abound for him, few exist for the woman. A review of the major components of strong support systems follows.

Perhaps the person most critical to the psychiatrist-mother's effective functioning is her spouse. His encouragement, support, and willingness to make compromises are vital. Bailyn (5), in an article about family constraints, pointed out the importance of the lifestyle of the spouse. Professionally qualified women married to men whose work is all-important to them and who consider family matters secondary are not likely to work. It is the wives of men who maintain a balance of commitments to work, family, and society who follow their professional careers. An egalitarian marriage is necessary if dual careers in a family are to coexist successfully.

While the reactions of a woman's spouse are important, those of her children are no less so. Their willingness and ability to adapt to surrogate care, their physical and emotional health, their pride in their mother's accomplishments, their acceptance of her curtailed activities in many areas of their lives, and their independence and sense of responsibility are all reinforcing for her.

Support and help of friends and neighbors are also necessary—someone to take the woman's place in the car pool, someone to check on the new baby-sitter, people who understand why she may not be able to attend the PTA or play bridge or chat leisurely over a cup of coffee, teachers who treat her children like any others, etc. She relies on the good will and understanding of many people around her, but, as in her marriage, reciprocity is important. Friends, neighbors, and acquaintances cannot be expected to respond to her wishes and needs without getting something in return. Often recompense is asked in the form of casual professional services—a curb-side consultation or a query about referrals and resources. If she can provide such an occasional service with grace and sensitivity, she becomes a valued neighborhood resource. It is wisest that she give her services only when asked and only when needed. Many lay people fear psychiatrists, believing them to be omniscient and powerful, and the most casual contact may arouse discomfort and anger. She must be alert to this aspect of her relationships with the people around her and ease their discomfort whenever she can.

The people she hires to provide child and household care are critical in her support system. Her psychiatric experience heightens her awareness of the optimal care needed by her children. The effort and care she takes to select reliable, warm, and honest people will be to her advantage in the end. She is wise to select people whose child-rearing techniques and standards of household cleanliness resemble or exceed her own. In so doing, she will ease her worries about her home and family and be able to function better at work. As is the case in any employee-employer relationship, the people she hires will need some things from her in return—adequate and prompt pay for services rendered, paid vacations and sick leave, personal respect from members of the family, a minimum of criticism, clear guidelines for expected work performance, and thanks for work well done.

A woman's professional contacts, including her employers, coworkers, and patients, are also part of her support system. In a recent survey of the nation's psychiatrists (6), a higher percentage of women than men reported working in salaried positions. While the woman who confines her work to private practice is able to manipulate her own schedule to facilitate her multiple roles, the employed woman must rely on her employer to help her do so. A supportive employer is essential but may be hard to find. Kaley (7), in a study of attitudes toward the dual role of the married professional woman, found significantly more negative attitudes among male professionals than female professionals. Since 89% of psychiatrists are men, most female psychiatrists will be employed by a male psychiatrist and influenced by his attitudes. Schwartz (8) has examined the related needs and attitudes of women and their employers. She documented the greater productivity and creativity of the part-time female employee as well as the lower turnover rate and challenges the existing negative sanctions and attitudes toward wives and mothers who work. Benedek (9), in a paper entitled "The Fourth World of the Pregnant Therapist," illustrated the problems of a psychiatrist-wife-mother working in

a salaried position in which her employers and colleagues held negative attitudes toward her employment. Her experience and the experiences of others (10) stress the importance of a supportive employer and colleagues who understand and appreciate her multiple roles. Often the professional woman needs part-time work, maternity and child care leave, and individualized work schedules. She should make certain that these alternatives are available to her before accepting employment.

When and if she avails herself of such alternatives, coworkers such as other physicians, nurses, and secretaries need to be kept abreast of her schedules, her replacements when she is unavailable, and her future plans. Such communications help to maintain good relationships with colleagues and coworkers, thus enhancing the effectiveness of her work performance. A supportive and coordinated network of coworkers and colleagues is as essential to her as to any physician. It is therefore important that she be sensitive to biases and prejudices among the people who form that network. Those who resent or disapprove of her multiple roles may easily undermine her effectiveness, and it is to her advantage to establish positive rapport and effective working relationships with such people.

Finally, although it is seldom stated in this way, patients form the mainstay in the support system surrounding any psychiatrist. One simply cannot practice psychiatry without the presence and cooperation of his or her patients. Most patients adapt easily and quickly to a female psychiatrist. Some prefer a woman, just as others prefer a man. One recent study (11) showed that people in general, and men in particular, were more open to women in general than they were to men. If this holds true in psychiatry, the female psychiatrist would appear to have at least an initial advantage over her male colleague in working with patients. Whether she does or not, she must consider the needs and sensibilities of her patients, just as she does those of the other people surrounding her. Her patients also need to know her work schedules, her plans for vacations and leaves, and her replacements when she is unavailable. She is wise to share with them the fact that she chooses to function in multiple roles. Patients often appreciate having a psychiatrist who is also a wife and mother. They may see this as evidence that she is a relatively normal and human person capable of greater understanding and empathy. Patients are usually considerate if they know their psychiatrist functions as a wife and mother as well as caring for them. They are less likely to make unreasonable demands on her time and energies and are more likely to work in a collaborative, responsible fashion within the psychotherapeutic relationship.

In summary, then, the psychiatrist-wife-mother has a potentially supportive network of people including her husband, children, employees, friends, neighbors, colleagues, coworkers, and patients. She must foster and maintain good relationships with these people if their support is to be forthcoming. When it is, and when other life stresses are minimal, she can function with relative ease in her multiple roles.

CHANGING RESPONSIBILITIES

The demands and responsibilities of the psychiatrist's roles shift over her lifetime, and she must plan her schedules and activities accordingly. Psychiatric training and the birth of children often overlap. Many women, knowing the genetic and environmental disadvantages that children of older mothers may suffer, feel that they have prolonged motherhood as long as is wise by the time they reach residency. In Roeske's sample (3) only half of the women waited until the completion of their training to begin their families. The problems encountered during this period of life include finding a residency program flexible enough to meet the need for maternity leave and part-time schedules (12), hiring adequate child care for completely dependent children and paying for this care, and stretching limited time and energy to meet the heavy demands from both the home and the residency training program.

As their children reach school age, most women have completed their training. The type of child care that is needed changes. The children are at school for several hours a day, during which time neither the mother's care nor surrogate care is needed, although school vacations, holidays, and periods of illness still require the presence of someone. The psychiatrist-mother may choose to schedule these times to be with them herself. If so, she will need a flexible work situation. She cannot expect to work, spend time with her husband and children, and do all the housekeeping chores. Housework and gardening may be shared by all members of the family but almost always need to be supplemented by outside help. Dividing and assigning these tasks will require organizational skills.

As the children reach adolescence, and their need for supervision lessens, she may be well into her career. Most women find that this is not a good time to reduce their investment in their children significantly. Rather, their style of interaction shifts. Adolescence, with its burgeoning independence, identity crises, peer group pressures, and hormonal upheaval may be a trying time for young people, and the availability of a trusted adult is important. It is wise for parents to maintain a sensitive, vigilant interest in their children during this period; the psychiatrist-mother is likely to be aware of this need and responsive to it.

Once the children leave home, her responsibilities for their needs diminish significantly and she is freer to pursue her other interests. Her career may now gain new emphasis and she may increase her workload. If she does so, the increase in her earnings will ease the financial burdens characteristic of this period of life, e.g., college costs, marriage expenses, and the care of aging parents. She and her husband may now pursue mutual interests that have long been thwarted through

the child-rearing years. She has time for reflection, reassessment, and leisure. While menopause, with its hormonal and potential emotional imbalances, is near, involvement in her career, increased interaction with her spouse, and the lessened demands of motherhood may ease her through this transitional period of her life. She can still allow time to share the post-separation joys and crises of her children—to be mother of the bride or groom, to be grandmother-helper with the new baby.

As she and her husband age and approach death, her career may once again sustain both of them. Barring ill health she may practice as long as she lives and maintain her independence if she is widowed. Hoffman (2) suggested that "a woman with combined roles may retain an enthusiasm and creativity in her work even in her very mature years when many men who have constantly pursued their careers become bored, stagnant and bureaucratized." Because the practice of psychiatry is not strenuous, she may be able to maintain an active professional life long after people in other fields are forced to retire, while continuing to have a rich interchange with her husband, children, grandchildren, other family members, and friends. Of course, she may choose to retire from active professional life and live her last years involved in other activities. If she does so, it is likely that she will look back on the completion of her multiple tasks with the sense of accomplishment and pride that a varied and productive life brings.

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Some Problems in Learning To Do "Good Psychotherapy"

BY MAGNUS LAKOVICS, M.D.

In a discussion of some problems that psychiatric residents encounter in learning to do good psychotherapy, the author compares learning techniques of medicine and those of psychiatry. He concludes that one of the most difficult experiences for the psychiatric resident is learning tolerance for ambiguity and uncertainty.

DURING RESIDENCY training, I became very concerned with the problem of learning to do psychotherapy well. I wrote the body of this paper at that time; however, I could not finish the paper since my residency training had not yet ended and my thinking in this area was not fully developed. Consequently, I put the paper aside. John P. Spiegel's Presidential Address in the July 1975 issue of the *American Journal of Psychiatry* (1) stimulated my thoughts again and enabled me to conclude my paper.

Learning to do what I will call "good psychotherapy" is by no means a minor task. Considering the numerous types of psychotherapy advocated by the various schools of psychiatry and psychology for every kind of disturbance from schizophrenia to the prob-

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lems of the dying, one wonders how the novice ever figures out which type of therapy is best for a particular patient, let alone how to practice this therapy well. In this paper, I will delineate some of the difficulties encountered by a novice physician in learning to do good psychotherapy. Certainly, we all share in the curiosity of how to do our job well; if not, perhaps Samuel Goldwyn was right when he said that anyone who spends money on a psychiatrist should have his head examined.

DISCUSSION

Before I entered psychiatric residency training, I was taught in medical school that people "had diseases." I learned that some diseases had known causes, while others were idiopathic. I also learned that once we could establish that Mr. X had appendicitis we could then proceed to treat him. I also learned that there are various indications for one type of treatment versus another. My experiences with medicine were that the problem of what to do fell in one of three categories: 1) there is a generally agreed upon definitive treatment for Mr. X's disease; 2) there is no known treatment for Mr. X's disease; and 3) there are treatments for Mr. X's disease but it is questionable whether they will improve his condition. The goal, of course, is to restore Mr. X's health or, if this cannot be done, to make him as comfortable as possible. With this kind of background and consciousness I began my first extended psychotherapeutic encounter with a patient during my first year of residency training.

Mr. A, one of my first patients, came to the Adult Psychiatry Clinic[1] with an initial complaint of continual feelings of worthlessness and inability to tolerate well any compliments or positive feelings extended toward him. He wished to talk with me to better understand this peculiar state of affairs, hoping to rid himself of these problems. In this case my goals for Mr. A were similar to the goals for Mr. X, i.e., to restore or increase the patient's well-being. However, it quickly became apparent to me that the means, as well as my conceptual understanding of the nature of the distress, had to be quite different. One of the problems of recent medical school graduates is that we still prefer to speak in the language of diagnosis, indications, and treatment, even in relation to problems of the sort presented by Mr. A, since we are most familiar with this language. At times this can be more confounding than helpful in dealing with problems such as Mr. A presented to me in the clinic. The tendency to use medical terminology is one of the first problems I struggled with as a beginning psychotherapist.

Learning how and when to treat in medicine is by no means simple, but at least it is conceptually within reach. One of the most frequently used ways to teach is bedside teaching by experienced instructors. Sometimes how a patient should be treated is debatable. However, there are certain generally known things one should almost never do—e.g., give insulin to a hypoglycemic patient. Procedures that, almost without exception, are wrong are usually pointed out to the student very quickly by his instructors. If nothing else, this teaches the student what he should not do, the benefit being an absence of doing what is wrong. In psychotherapy supervision (supervision by faculty members of patients I saw in the clinic) I do not think I was ever told that what I was doing was wrong. This could be because I had been doing everything right, but a more likely possibility is that the problem of knowing what is wrong in psychotherapy is much more complex than it is in medicine.

It also occurred to me that I could think of almost nothing, with the exception of violations of the law and professional ethics, that could be wholly agreed upon by my faculty as being the wrong thing to do in psychotherapy. (I suspect this is true of most psychiatric department faculties across the country.) Perhaps I was not aware of all of the faculty's consensually validated opinions about psychotherapy. This may be one of the problems of learning good psychotherapy, i.e., the faculty only talks about what they do not agree on. I do not mean that I would prefer more dogmatism; I do mean to convey the difficulty in situating himself that a novice in this field has.

I also feel there are few things that would generally be considered as always correct in psychotherapy. One psychoanalytically oriented supervisor might say, after my sessions with Mr. A, that if we did not get to his castration fears then we would only have scratched the surface. Another supervisor, oriented more toward autonomous psychotherapy (a type of psychotherapy which has as its main goal the preservation and expansion of the patient's autonomy [2]), might say, "Why do you want to talk about castration if the patient doesn't?" One could say that the analytic approach is clearcut—learn by observing the expert. Then one gets the idea that the resolution of the sorts of problems patients present to psychotherapists is completely independent of the therapist's approach to them. This may be true, but it is certainly different from the situation with Mr. X's appendicitis. Both surgeons and internists would generally agree that therapy for appendicitis is usually surgery. The novice in psychotherapy faces a much more difficult task in learning; he cannot completely rely on the experience of his colleagues to help him treat either the usual or unusual problems that his patients bring to psychotherapy.

Another source of learning in psychotherapy is the nonresearch literature. An interesting quote from a book on psychoanalytic technique edited by Menninger and Holtzman (3) very poetically gives us a sense of how a patient may view the analytic posture in inducing regression.

[1]The Adult Psychiatry Clinic, Upstate Medical Center, Syracuse, N.Y., is primarily a self-referral clinic staffed by trainees (psychiatry residents, interns, psychology interns, and medical students) and supervised by the faculty of the Department of Psychiatry.

With half a laugh of hearty zest
I strip me off my coat and vest.

Then heeding not the frigid air
I fling away my underwear.

So having nothing else to doff,
I rip my epidermis off.

More secrets to acquaint you with
I pare my bones to strips of pith.

And when the exposé is done
I hang, a cobweb skeleton.

While you sit there aloof, remote,
And will not shed your overcoat. (pp. 60–61)

Allen Wheelis, an existentially oriented psychotherapist, views psychoanalytic therapy very critically and sees its outcome as anything but illuminating (4). He says,

> When, however, in therapy a life story is reworked to expose the forces which "drove" one to do as he did, emphasizing traumas which twisted him and shaped defenses, hidden constraints, situational and libidinal, which required that he react in the way he did and in no other—in all this, too, one is rewriting the past, is taking a story which must have contained some elements of freedom and responsibility and retelling it in terms of causes lying outside one's control, so teaching the patient to see himself as the product of inner and outer forces. Where he feels himself to be the author of action, his analysis will reveal him as an object being acted upon. He then comes to regard himself as being lived by unknown and largely unknowable forces. As consolation prize he may acquire the capacity to guess at the nature of those obscure forces that move him. But only guess. He must not attempt seriously to bear witness to that which, by definition, he cannot know. He must remain forever the dilettante, making modest conjecture at the gusts which blow him this way and that. He becomes not only an object but opaque, most necessarily to himself. (pp. 65–66)[2]

The literature is filled with such variations of approaches to psychotherapy and with endless criticisms of the various approaches. In addition one may find in the literature profoundly different approaches to very similar clinical problems. Certainly one would not expect a psychoanalyst like Karl Menninger and an existential psychotherapist like Allen Wheelis to agree; however, a novice learning psychotherapy deals with a particular patient's problems, not the conflict between analytic and existential approaches. Thus, even though I may be familiar with both approaches, the confusing question of how I should assist my patient in resolving his problems is still unanswered.

Certainly, if the novice has difficulty in finding what he ought to do from his supervisors and the nonresearch literature, he can always turn to the research literature to find the answers. Let us consider the problem of Mr. A and see if we can find research data that could help me plan a course of action in assisting him. His two primary problems—habitual feelings of worthlessness and intolerance of positive regard—must first be classified in order to find research data to compare how his class of problems was dealt with across a wide sample of different solutions. Into which class does my patient fit? Of course, I first have to familiarize myself with all the ways to classify patients. However, when one undertakes this task one encounters a whole new set of problems. One has to ask whether classificatory schemes are useful besides being valid and reliable. Even if they are valid and reliable (since similarities and differences can be found in any two or more persons in the world), the question of whether classifying my patient is useful will depend on my results.

Let us say this patient's class of problems falls best into the category of depressive neurosis. Freedman and Redlich (5) sum up the literature on depression by saying,

> There is no general agreement as to preference of organic or psychosocial methods of therapy; even in the individual patient, it is often difficult to come to a decision. Our overall recommendations are to treat mild depression by psychotherapy and severe cases by a combination of psychosocial and biological treatment. (p. 556)

From this we can at least say that psychotherapy is possibly the best method of approach to my patient's problems.

The job of finding out what to do in psychotherapy with this patient still remains. What kind of psychotherapy should be used—psychoanalytic, existential, Gestalt, client centered, rational-emotive, or autonomous psychotherapy? This is by no means a complete list of all available psychotherapies. Again Freedman and Redlich (5) sum up our dilemma in regard to the research literature:

> The psychosocial therapies in particular have not been thoroughly evaluated. In any case, there is no "hard-nosed" documentation of their effectiveness. There are very few comparisons of treated and untreated cases. . . . In most cases, evaluations are made by the therapist himself, who is bound to be a subjective optimist and inclined to overestimate his successes and deny his failures. In the literature, there are surprisingly few reports of failures. (p. 300)

As you can see, the novice is not shown the road to nirvana through the research literature either.

Finally, we can say that there are many many different ways to bake a cake and final judgment of its quality should perhaps be left to the consumer. The patient may be our only qualified guide to the problem of knowing whether what we did in therapy was good or bad, i.e., whether we helped him, did nothing, or made things worse. However, one of the first things we are told when we enter the field of psychotherapy is that

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the patient's satisfaction with your work is a poor guide to its quality. This is attributed to the problem of transference, since the patient may unconsciously and symbolically identify the therapist with some previously significant person in his life with whom he has either had or fantasized a very positive relationship. You may also be seen by him as an all-knowing and infallible savior. Implicit in this rationale is the idea that patients do not know what is good for them—that you are the doctor and are therefore supposed to know what is good for the patient. However, I do not necessarily believe that the doctor always knows best.

CONCLUSIONS

I have tried to illustrate some of the problems that face a novice physician in attempting to learn to do good psychotherapy. Having finished my residency and started a private practice, in addition to working in a teaching hospital and being on the faculty of a medical school, I feel that I know when I do good psychotherapy.

Perhaps Alexander Pope, in *An Essay on Criticism*, best recognized the general dilemma of human existence with respect to knowledge when he wrote:

> A little learning is a dangerous thing;
> Drink deep, or taste not the Pierian spring:
> There shallow draughts intoxicate the brain,
> And drinking largely sobers us again.

With experience and "drinking deep" one gains perspectives that never completely elucidate the morass of confusion and ambiguity. The recognition that psychotherapy and being a psychotherapist must entail ambiguity is perhaps the hardest of all lessons to learn for a novice physician engaged in the enormous task of learning to do good psychotherapy. Spiegel, in discussing the problem of psychiatry as a high-risk profession (1), best sums up this general dilemma for the psychiatrist and the psychotherapist,

> Because of the large number of variables underlying any type of human behavior, our therapeutic decisions are always taken in the context of a certain amount of ambiguity. Since the data available are never sufficient, we have to learn to live with uncertainty. Clinical judgment, based on training and experience, makes the uncertainty manageable, but *every decision we make is a risky decision*. (p. 697)

It is precisely this uncertainty which makes the task of learning to do psychotherapy well such an unsettling experience for the inexperienced. However, it is also this uncertainty and ambiguity that characterizes the everyday life of the experienced, well-trained, and effective psychotherapist.

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Physicians' Erotic and Nonerotic Physical Involvement with Patients

BY JUDITH ADAMS PERRY, M.D.

The author surveyed 164 female physicians to determine their attitudes and practices regarding erotic and nonerotic physical contact with patients. Compared with a previous study of male physicians (1), more female physicians believe in and engage in nonerotic touching, but fewer believe in and engage in erotic touching. None of the female physicians reported sexual intercourse with patients as compared with 11% of the male physicians in the previous study.

FOR 24 CENTURIES, ethical standards have prohibited doctors from engaging in sexual intercourse with patients (2–4). Only a few authors have openly refuted this guideline (5, 6).

Kardener and associates (1) studied 460 male physicians and found that most of them did not believe or engage in nonerotic touching, but 5%–13% engaged in some kind of erotic behavior with their patients. Kardener and associates' study stimulated thought about the female physician, whose role appears to have unique qualities that distinguish her from her male colleagues (7, 8).

Are there significant differences between the sexes in beliefs and practices regarding physical contact with patients? What are women's attitudes toward this delicate area of the doctor-patient relationship? The present study was designed to parallel and expand Kardener and associates' research by examining these questions.

METHOD

The 24-item questionnaire used included 9 items about beliefs and practices regarding nonerotic contact with patients (defined as hugging, kissing, and affectionate touching) and 9 items about erotic contact (defined as behavior primarily intended to arouse or satisfy sexual desire). Six items focused on treatment of sexual problems. I also requested demographic data. Most responses used the following scale: never, rarely (less than 5% of professional experience or opinion), occasionally (less than 25%), frequently (more than 50%), and always.

The questionnaire was mailed to a systematic random sample of 500 female physicians, half in New York and half in California (9). Responses were anonymous. Statistical analysis was done by chi-square tests.

RESULTS

General Data

Thirty-three percent (N=164) of the 500 physicians responded, and there were 156 usable questionnaires (2 respondents gave wildly exaggerated responses and 6 responses were incomplete). One letter of protest against this type of research was addressed to Loma Linda University.

The age distribution of the respondents was as follows: under 30, 18%; 30–39, 30%; 40–59, 38%; and over 60, 14%. In contrast, 75% of the male physicians in Kardener and associates' study were in the 40–59 age group. The women respondents were significantly younger ($p<.01$).

Fifty-six percent (N=84) of the female physicians were married, compared with 86% of the male physicians ($p<.01$). More women than men were single (27% versus 3%, $p<.01$). Eleven percent of the female respondents were divorced or separated and 5% were widowed.

Seventeen specialty groups were represented among the female physicians. Results for each item were tabulated for the group as a whole as well as the four specialties with the greatest representation: pediatrics, psychiatry, general practice, and internal medicine.

Years in practice indicated by the 150 physicians responding to this question were as follows: 1–10 years, 53%; 11–15 years, 9%; 16–24 years, 21%; and over 25 years, 17%. Compared with Kardener and associates' study of male physicians, more women had been in practice 1–10 years ($p<.01$), fewer for 11–15 years ($p<.01$), and essentially the same number for more than 15 years.

Treatment of Sexual Problems

Table 1 summarizes the involvement of the female physicians in my sample and the men in Kardener and

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TABLE 1
Physicians' Responses to the Question, "Do You Attempt to Treat Sexual Problems in Your Medical Practice?"

Group	N	Response (in Percents)			
		Never	Rarely	Occasionally	Frequently or Always
Female physicians					
General practice	18	11.1	5.5	66.6	16.6*
Internal medicine	18	33.3	33.3	22.2	11.1*
Pediatrics	37	41.0	32.0	27.0	0.0*
Psychiatry	27	0.0	26.0	48.0	26.0*
Other specialties	38	63.1	15.8	15.8	5.3
Total	138	34.0	23.0	33.0	10.0**
Male physicians***	445	11.0	27.0	36.0	26.0

* General practice plus psychiatry significantly more than internal medicine plus pediatrics ($p < .01$).
** Females significantly less than males ($p < .01$).
*** From Kardener and associates (1).

TABLE 2
Physicians' Responses to the Question, "Do You Believe Nonerotic. . .Touching of Patients May Be Beneficial. . .?"

Group	N	Response (in Percents)			
		Never	Rarely	Occasionally	Frequently or Always
Female physicians					
General practice	19	21.0	26.0	32.0	21.0
Internal medicine	19	26.0	47.0	11.0	16.0
Pediatrics	38	16.0	26.0	32.0	26.0
Psychiatry	30	17.0	20.0	53.0	10.0*
Other specialties	44	27.2	20.5	31.8	20.5
Total	150	21.3	26.0	33.3	19.3*
Male physicians**					
Psychiatry	112	30.0	43.0	25.0	3.0
Total	447	32.0	30.0	28.0	10.0

* Significantly higher for female than male respondents ($p < .01$).
** From Kardener and associates (1).

TABLE 3
Physicians' Responses to the Question, "Do You Engage in Such Practices [Nonerotic Touching]?"

Group	N	Response (in Percents)			
		Never	Rarely	Occasionally	Frequently or Always
Female physicians					
General practice	19	53.0	11.0	21.0	16.0*
Internal medicine	19	42.0	37.0	11.0	11.0*
Pediatrics	38	16.0	26.0	32.0	26.0*
Psychiatry	30	27.0	30.0	33.0	10.0*
Other specialties	41	46.3	26.8	17.1	9.8
Total	147	22.0	25.0	34.0	20.0*
Male physicians**					
Psychiatry	110	45.0	41.0	13.0	1.0
Total	446	42.0	33.0	20.0	6.0

* Significantly higher for female than for male respondents ($p < .01$)
** From Kardener and associates (1).

associates' study in treatment of sexual problems. Frequency of attempted treatment of sexual problems was not related to state of residence, marital status, or age. Of additional interest, female internists attempted to treat such problems less often than the male internists in Kardener and associates' study ($p<.01$).

Nonerotic Behavior

Responses to 2 questions regarding nonerotic behavior are presented in tables 2 and 3. I also asked 2 questions regarding nonerotic contact to determine physicians' comfort in touching someone of the same

sex versus the opposite sex; no difference was found. The women physicians under 30 years of age believed and engaged in nonerotic touching more often than women physicians above 50 ($p<.01$ and $p<.05$, respectively).

Among the female physicians, no relationship was found between belief in or practice of nonerotic touching and specialty, state of residence, or marital status.

Sixty percent (N=90) of the sample replied to an open-ended question asking under what circumstances nonerotic physical contact (holding, hugging, or kissing) might be beneficial. The circumstance described most often (39%) was to "reassure, empathize." Twenty percent reported "crises" (such as bereavement or congratulations) and 20% reported young or elderly patients. Six percent of the respondents (all psychiatrists) indicated that nonerotic physical contact might be appropriate with schizophrenic, agitated, depressed, or passive-dependent patients. One psychiatrist commented, "When patient initiates physical contact, nonresponsiveness would be read as rejection." Eight percent felt that nonerotic physical contact would not be beneficial under any circumstances. For example, an ophthalmologist replied, "I'm too busy to even think about such things. My practice is confined between the upper and lower lids."

Erotic Behavior

Two percent of the physicians believed erotic contact with patients was beneficial. Female physicians believed and engaged in erotic behavior significantly less often than the male physicians previously studied ($p<.01$ and $p<.05$, respectively). Most female and male physicians indicated that erotic behavior should never include intercourse with a patient (98% and 95%, respectively).

Physicians were asked to indicate the actual number of their involvements in erotic behavior with patients, excluding intercourse. One female physician (a pediatrician) responded affirmatively, indicating 1 patient. Eleven percent (N=33) of the male physicians responded affirmatively, with 70% of this group indicating fewer than 5 patients. None of the female physicians reported coital involvement, whereas 11% (N=33) of the male physicians acknowledged coital involvement.

Sixty percent (N=94) of the respondents replied to the open-ended question, "Under what circumstances might erotic behavior be utilized in treatment?"; 77% of these respondents indicated that erotic behavior is never beneficial. The other 23% cited such circumstances as "wise teaching, never by indulgence," "specific sexual problems," "treatment of sick M.D.s," "extreme feelings of inadequacy," "sex education involving two partners, such as Masters and Johnson," "not unless willing to continue rest of life," and "undecided."

DISCUSSION

Half of the female physicians believed in nonerotic touching; 2% believed in erotic touching. By comparison, the previous study (1) revealed that fewer male physicians believed in nonerotic touching. However, more male then female physicians believed and engaged in erotic touching. Fewer women than men attempted to treat sexual problems in their practice. More younger women than older women touched patients. Female physicians' attitudes toward touching were not related to the sex of the patient, area of specialty, marital status, or geographical location.

Two variables should be discussed when one compares this study with that of Kardener and associates. The female respondents in this study were younger than their male respondents. Also, the women represented 17 specialties (including pediatrics), while there were only 5 specialties (excluding pediatrics) represented in the male sample. The one woman who indicated erotic contact with a patient was a pediatrician.

Physicians have definite and sometimes opposing viewpoints regarding nonerotic and erotic involvement with their patients. Male physicians do not believe in erotic involvement but in practice do become involved, while female physicians consistently oppose erotic involvement.

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TABLE 1
Suicide Attempters Among Three Groups of College Students

Sample	Sex	Number	Attempters		Methods Used
			Number	Percent	
Group 1	Female	70	7	10.0	Overdose (4) Slashed wrist (3)
Group 2	Female	60	9	15.0	Overdose (7) Overdosed twice (1)* Shooting (1)
	Male	60	5	8.3	Overdose (2) Strangulation (2) Overdose and strangulation (1)*
Group 3	Female	63	17	27.0	Overdose (10) Slashed wrist (2) Hit by car (3) Drowning (1) Drowning and auto accident (1)*
	Male	40	6	15.0	Overdose (6)
Total		293	44	15.0	—

* Multiple attempters.

unusual attempt methods, which might suggest falsification, supports the validity of these rates.

In addition to reporting actual attempts, 64.8% of the sample reported that on at least one occasion they had thought about attempting suicide. The methods considered encompassed a wide range, some spectacular (e.g., crashing into the White House in an airplane) and some mundane (e.g., "I thought of taking some pills"). Of particular interest was the high frequency among those reporting suicidal thoughts of contemplated suicides involving automobile accidents (25.1%). Also common were lengthy descriptions of precise, meticulously planned, step-by-step procedures leading to "certain death"—often with an explanatory remark at the end stating, "but I never would do it."

DISCUSSION

The high number of suicide attempters in this study suggests that, at least among college students, suicidal behavior may be more prevalent than previously hypothesized. It is thought that college students have higher suicide attempt rates than same-age cohorts without college experience (1–5), and such a comparison needs further exploration. Since these data are for young men and women with a fairly long average life expectancy, one would strongly expect that the prevalence of suicide attempters would increase for these college educated cohorts as they grow older and have more time to join the group of attempters. This increase would be attenuated only by the death rate, including deaths from successful future attempts.

Data about suicidal thoughts confirm the common suspicion that many people think about suicide at some time or other. The high incidence of self-destructive thoughts involving automobiles supports investigations suggesting that many automobile accidents are intentional or subintentional suicides (25).

These prevalence data lend themselves to different interpretations. One interpretation is that the rate reported is also indicative of the rate for college students of the same age of other generations. Since comparative data are not available for past years, the validity of applying these findings to other cohorts cannot be determined. An alternative interpretation is that the rate reported reflects uniquely the behavior of these particular cohorts of 1972–1973 college students. This latter interpretation is consistent with the reported increase in attempts at particular colleges and universities (5). A complete study of various cohort differences might use more sophisticated methods than this investigation, such as the cross-sequential design developed by Schaie (26). This method calls for repeated data collection from different-aged cohorts to compare age-related and cohort-related changes.

Overall, this study indicates that it would be fruitful to supplement current annual incidence statistics with prevalence data from retrospective studies to gain a more comprehensive picture of the extent of suicidal behavior. The rate observed here for college students is so high in absolute terms that the problem of suicidal behavior among college students may warrant serious attention. The high rate also underlines the need for further investigation to determine the extent to which the data reported here are indicative of the lifetime prevalence of suicidal behavior in the population at large.

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Psychiatric Test Assessment of Patients with Psychomotor Epilepsy

BY E.A. SERAFETINIDES, M.D., PH.D., AND DIANA G. CHERLOW, M.A.

The authors evaluated the psychiatric status of 31 patients who had temporal lobectomies and 6 patients who received implantation of depth electrodes for relief of epileptic seizures. Results showed a general postoperative improvement in overall psychopathology (measured by the Brief Psychiatric Rating Scale) and in depression in particular; however, depression tended to recur with the passage of time after lobectomy.

THE METHODOLOGICAL and conceptual difficulties encountered in studying psychiatric aspects of psychomotor epilepsy are well known (1–4). In this paper we report the results of a psychiatric study of a sample of epileptic patients selected on the basis of the following strict criteria: presence of psychomotor types of seizures in which automatisms are at least part of the seizure pattern; EEG evidence of temporal lobe focus of seizure activity; lack of therapeutic response to long-term anticonvulsant medication; IQ above 70; and absence of radiological evidence of a space-occupying lesion or arteriovenous malformation (5).

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The patients selected for study were evaluated through implanted electrode techniques for possible neurosurgical treatment. They were also given the following tests: the Brief Psychiatric Rating Scale (BPRS) (6), as an index of overall psychopathology; the Iowa Hostility Inventory (IHI) (7), as an index of hostility (since aggression is frequently seen in patients with such seizures); and the Zung Self-Rating Depression Scale (SDS) (8, 9), as an index of depression to validate postoperative clinical impressions. Results of speech and memory assessment of these patients are reported in another paper (10). Informed consent was obtained from the patients for all procedures employed in this study.

METHOD

Thirty-one epileptic patients who had had an anterior temporal lobectomy and 6 patients who had received temporal lobe depth electrode implantations took the BPRS, IHI, and SDS. Data on sex, handedness, and treatment received are given in table 1. In addition to these tests, data were collected on the patients' education, marital status, employment, ability to drive (used as an index of rehabilitation) and other characteristics. Each patient was also evaluated clinically for seizure relief, mental status, and neurological abnormalities. These clinical findings were reduced to two scales. One measured seizure relief: each patient was given a rating of 0 if he no longer had seizures, 1 if he had no more than 5 seizures per month, 2 if no more than 15 per month, and 3 if he had seizures more frequently than 15 times per month. The other scale classified patients on the basis of neurological problems and/or memory deficits noted in the neurologist's follow-up examination. A score of 0 represented no deficits or a very minor one; 1 represented two mild deficits or one severe one; and 2 represented more than two mild or one severe problem (e.g., aphasia or hemiplegia).

Seven comparisons were made between subgroups of the patient sample.

1. Right- versus left-lobectomy groups (only right-handed patients included).
2. Left- versus right-handed patients.
3. Preoperative versus postoperative results.
4. Postlobectomy patients versus implantation patients.
5. Recent versus nonrecent lobectomy patients ("recent" defined as two years or less since operation).
6. Male versus female lobectomy patients.
7. Lobectomy and implantation patients versus normal and psychiatric patient population results.

Factors such as marital status, employment, and ability to drive were also examined in relation to patient sex.

TABLE 1
Sex and Handedness of Patients Who Received Lobectomy or Electrode Implantation for Seizure Relief

Patient Group	Number	Sex		Handedness	
		Male	Female	Right	Left
Right lobectomy	22	12	10	16	6
Left lobectomy	9	6	3	7	2
Electrode implantation	6	4	2	3	3

RESULTS

The Brief Psychiatric Rating Scale

Table 2 shows significant results from the BPRS. The preoperative lobectomy patients tended to show more psychopathology than the postoperative group. Although there were no overall male-female differences on the BPRS, females who were not employed showed a greater incidence of psychopathology than those who were. The BPRS also showed significant differences between groups of males in that males who could drive showed less psychopathology than those who could not.

The Iowa Hostility Inventory

There was only one significant result from the IHI. Employed females were less hostile than unemployed females (mean scores 1.0 and 5.0, respectively; $p<.05$). It is interesting that, as was also shown by the BPRS and SDS ratings, employment played a significant role in the psychiatric health of the women in this study.

The lack of preoperative and normative data for this test made impossible a number of comparisons, which may be considered in future studies.

The Self-Rating Depression Scale

Table 3 shows significant results from all comparisons made between scores of subgroups on the SDS. There was significantly more improvement in postlobectomy patients than in both preoperative lobectomy patients and patients who had had only an implantation. There was no difference in the amount of depression exhibited by both of these latter groups. One can conclude that the lobectomy relieved some of the depression that these patients experienced prior to the operation.

Patients who had had a lobectomy within the two years prior to the study tended to be less depressed than those operated on longer ago. Whereas recent lobectomy patients showed less depression than preoperative patients, there was no difference between preoperative patients and postlobectomy patients who completed the SDS more than two years after surgery.

These findings indicate the need for regular rehabilitative and psychotherapeutic follow-up to prolong the beneficial effects of lobectomy on depression. Such a

TABLE 2
Comparison of Patient Subgroup Scores on the Brief Psychiatric Rating Scale

Group 1			Group 2			Comparison (Significance*)
Description	Number	Mean Score	Description	Number	Mean Score	
Preoperative lobectomy patients	7	40.43	Postoperative lobectomy patients	7	35.14	$p<.10$
Male lobectomy patients	16	32.69	Female lobectomy patients	12	34.42	n.s.
Employed female patients	6	26.67	Unemployed female patients	6	42.17	$p<.02$
Driving male patients	6	26.83	Nondriving male patients	10	36.20	$p<.05$

* t test.

TABLE 3
Comparison of Patient Subgroup Scores on the Self-Rating Depression Scale

Group 1			Group 2			Comparison (Significance*)
Description	Number	Mean Score	Description	Number	Mean Score	
Preoperative lobectomy patients	5	50.40	Postoperative lobectomy patients	5	37.00	$p<.10$
Preoperative lobectomy patients	5	50.40	Implantation patients	6	52.67	n.s.
All lobectomy patients	30	41.80	All implantation patients	6	52.67	$p<.02$
Recent lobectomy patients**	11	37.64	Nonrecent lobectomy patients	19	44.79	$p<.05$
Preoperative lobectomy patients	5	50.40	Nonrecent lobectomy patients	19	44.79	n.s.
Preoperative lobectomy patients	5	50.40	Recent lobectomy patients	11	37.64	$p<.10$
Male lobectomy patients	18	39.17	Female lobectomy patients	12	46.67	$p<.05$
Unemployed male patients	9	37.22	Unemployed female patients	6	52.00	$p<.01$
Nondriving male patients	11	39.91	Nondriving female patients	8	51.37	$p<.01$
Driving female patients	4	37.25	Nondriving female patients	8	51.37	$p<.05$

* t test.
** Recent lobectomy patients had had surgery less than 2 years before the study.

systematic follow-up would also provide a much-needed test of the effects of this operation on depression in epileptic patients.

Male postlobectomy patients were less depressed than female ones. Since Zung (9) found no sex-related differences in the normal and patient populations he studied, we further analyzed these findings in terms of marital status, employment, and the ability to drive. Single women were not found to be any more depressed than married women or than single men. Unemployed females were not more depressed than employed ones, but they were more depressed than unemployed males. Finally, females who could not drive were more depressed than both females who had licenses and males who did not. These are interesting results, since they show that epileptic men do not suffer a greater loss of self-esteem than epileptic women from confinement and dependence due to inability to work or drive; indeed, if anything, men lose less self-esteem. These observations as well as those on the influence of employment on women patients are intriguing, but additional research is needed before they can be fully interpreted.

Neurological Findings

The difference in frequency of seizures between the postlobectomy patients, who had fewer seizures, and those patients who received implantations ($p<.002$) is further testimony to the importance of the operation in such patients. There were no other group differences related to seizure frequency.

There was a laterality effect—patients who had right lobectomies showed fewer neurological abnormalities and memory deficits than those who received left lo-

bectomies ($p<.002$). This difference held for all postlobectomy patients ($p<.002$) and for right-handed postlobectomy patients only ($p<.01$). Thus patients receiving a lobectomy of the dominant hemisphere are more neurologically impaired than those receiving a nondominant lobectomy. These clinical findings were supported by the results of more formal memory tests administered to these patients (10).

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Training Community-Based Paraprofessionals as Behavior Therapists with Families of Alcohol-Abusing Adolescents

BY JOSEPH D. TEICHER, M.D., RUTH D. SINAY, PH.D., AND JEROME S. STUMPHAUZER, PH.D.

To combat the increase in chronic alcohol use among adolescents in a large metropolitan area, community-based paraprofessionals were trained in behavior therapy and treated these adolescents and their families in the home. Preliminary evaluation of the program revealed encouraging results. This training supplied structure for the paraprofessionals' interventions with families and provided them with skills they are continuing to use in their community work.

ALCOHOL ABUSE and dependence among adolescents is fast becoming an alarming national concern; alcohol abuse is felt to be the nation's number one drug problem (1). Recently, the subject of teenage alcoholism has been featured in newspapers, magazines, films, and on television (2–6). Within the past 3 years many adolescents who came to the Los Angeles County—University of Southern California Medical Center with various psychological problems admitted to more than casual use and abuse of alcohol. To assess the trends and extent of drug abuse, we conducted a survey of 200 drug abuse agencies in Los Angeles. The agencies' responses suggested a continuing or increased amount of drug abuse among teenagers, a dramatic increase in alcohol abuse, and increased use of indigenous paraprofessionals, with a need for more (7).

There is considerable suggestion in the literature that drug abuse is learned behavior. Cahoon and Crosby (8) and Crowley (9) have presented interesting theoretical views of the particular psychological learning variables at work in various kinds of drug abuse. More direct evidence of the learning of alcohol abuse has been found by Stumphauzer (10), who has conducted structured behavior analysis interviews with teenage drinkers. He noted the presence of strong modeling and reinforcement, with little self-control

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The authors wish to thank Lupe Hernandez, Janice Lang, Rubin Rogers, and Esteban Veloz for their participation in the paraprofessional program.

and sometimes delayed punishment. Unlike other types of teenage drug abuse, the family often models, supplies, and reinforces alcohol use. Since alcohol abuse among adolescents is seen as a family-related problem, treating the adolescent with his family, and particularly at home, seemed a natural therapeutic strategy.

Family therapy in general continues to be a growing method of treatment (11–14). In particular, behavioral family therapy or family contracting is now finding wide acceptance (15–18). The assumption is that family members control, maintain, and "teach" each other a wide variety of complex behaviors, and further, that in order to change a child's or adolescent's behavior, the entire family and their exchange of controls should be the focus of intervention. Behavior therapy approaches to the treatment of alcoholism have been recently reviewed (19); it is noteworthy that, to our knowledge, no one has yet reported the use of behavior therapy with adolescent drinkers.

Considering the extent of alcohol abuse, it is apparent that not enough professionals are available to provide treatment to those in need. Trained paraprofessionals have provided direct, adequate, and inexpensive services to the community. Paraprofessionals' intervention at the neighborhood level is growth oriented, nonstigmatizing, and deemphasizes the "sick" label. Paraprofessionals of similar origins (i.e., ethnic and economic) have been found to be more acceptable to people needing help.

Since 1971 we have been studying subjects who were admitted to our Adolescent Crisis Ward with drug abuse problems. We soon discovered that once the adolescents left the hospital they would not return for aftercare. We found that adolescents and their families were much more responsive to community workers of similar backgrounds and to counseling sessions held directly in the home. It became increasingly evident that there was a need for community-based paraprofessionals trained in an effective, short-term, highly structured method of family intervention. While awaiting funding on a proposal for grant support, we decided to run a pilot program in which we trained paraprofessionals to conduct behavioral family therapy in their own communities, directly in the homes of alcohol-abusing adolescents. This project also gave us the opportunity to evaluate training methods, instruments, and treatment outcome.

METHOD

Training Procedures

Ten paraprofessionals (5 men and 5 women; 8 Mexican-Americans and 2 blacks) were selected to participate in this pilot study. Criteria for selection included 1) affiliation with a community-based agency for at least 6 months, 2) recognition as a paraprofessional, 3) ethnicity similar to that of the community, and 4) experience with drug-related problems and family work. The paraprofessionals were trained as a group for over 6 months (2 to 6 hours per week). They attended weekly didactic and workshop sessions in which principles of learning theory and family contracting were presented. The paraprofessionals were required to read Becker's *Parents Are Teachers* (20) and to complete a programmed manual, Stumphauzer's *Principles of Behavior Therapy* (21), and other relevant materials. In addition, they observed behavior therapy with families conducted by professionals and then discussed the process. They also had an opportunity to view and discuss films on social learning theory principles and practices (22, 23). The paraprofessionals were supervised as a group and then individually as they picked up families for treatment.

Treatment Process

Once training manuals and didactic sessions were completed, each trainee was required to treat three families in order to complete his participation in the program. Although there was a standard format of treatment and evaluation, the weeks of treatment varied with each trainee and each case. The first phase of treatment (initial contact) consisted of the initial few meetings with either the adolescent or the parent; its goal was information gathering and the establishment of an informal contract to work together. In the second phase of treatment (assessment), problem behaviors were specified. A reinforcement survey was administered to determine what rewards might reasonably be used in the program and what reasonable punishments were available as sanctions. Ways of measuring the important behavior were selected (Daily Behavior Graphs and Cards) and usually measurement was begun immediately to determine baselines, i.e., levels of the behaviors *before* intervention (24, 25). Data on drug use, the family, and functioning in school (i.e., attendance, grades, and conduct) were gathered as premeasures.

The third phase (initial contract) followed Stuart's format of general agreement, specific privileges, specific responsibilities, and signatures (26). The first contract worked on a relatively simple problem so that the family and the paraprofessional could experience success in contracting in a brief time (reinforcement). During the fourth phase (adjustment of contracting), which comprised the major thrust of treatment, the family and the paraprofessional worked on major family problems such as drug abuse, gang activity, severe school problems, and family relationships. During this phase contracts were changed and adjusted as necessary. Often outside agencies (e.g., schools and probation departments) were included in the contracting to ensure a thorough program and success. Family sessions centered on improving the family interactions. They often focused on changing from heavy use of punishment for undesirable behavior to positive reinforcement and praise for desirable behavior. In the fifth phase (termination), the family and outside agencies were given practice at making and adjusting contracts with mini-

mal guidance. Termination was agreed upon by the family and the paraprofessional, but in many cases some informal contact was maintained. Data on drug use, the family, and functioning in school were again collected at the time of termination as postmeasures of treatment success.

RESULTS

Training

Throughout the didactic presentations attendance was relatively high; at least 80% of the paraprofessionals were present at any given session. Of the 10 paraprofessionals selected, all participated in the didactic sessions. At the time a first case was to be selected, 4 paraprofessionals dropped out. Of the 6 who remained, 4 completed training.

At the start of training all paraprofessionals took a 100-item test that measured general knowledge of behavior modification. Their initial scores were all low, with no more than 30 correct answers. After completing their training, 4 paraprofessionals took the test again; the results (60 to 90 correct answers) showed a considerable gain in knowledge. However, caution should be used in drawing anything but tentative conclusions from this small sample. These 4 paraprofessionals also completed a questionnaire on the value of the training. In general, they agreed that the didactic sessions and workshops were helpful in learning the principles and the behavioral family therapy process. While they felt that *Parents Are Teachers* (20) was useful, they rated *Principles Of Behavior Therapy* (21) higher as a training manual. All were very positive about the need for continuing the training program with other paraprofessionals in their respective communities.

Treatment

The paraprofessionals selected cases from their agency caseloads shortly after training started. Twelve families have been treated (8 Mexican-American and 4 black). All of the adolescents selected presented with problems related to alcohol or drug abuse, school, the law, and their families. Almost all of the adolescents treated were experiencing severe problems in school in addition to drug problems. Some were truant, some were failing, and some had behavior problems. Usually contracts were made initially among the paraprofessional, the adolescent, and the family. When there was a severe school problem, the school was often included directly in the contracting. Four adolescents were on probation, and this necessitated an additional level of contracting.

All 12 youngsters presented with severe family problems, many with incorrigible behavior (e.g., verbal and physical aggression, running away, curfew violations, and gang activity). This necessitated a series of contracts that shifted their focus as the family and paraprofessional made progress. At times the paraprofessional made an individual contract with the adolescent and then moved on to work out a family contract.

Case Report

This series of events is exemplified by the case of Chavo, a 12-year-old Mexican-American. The first contract was a 4-week individual contract at the community center between Chavo and the paraprofessional. In it Chavo agreed to meet daily with the paraprofessional at the center and to try to attend school and stay sober. Each day he did both, the paraprofessional agreed to spend time with him and give him 50 cents in spending money. During the first week Chavo attended school 1 day and stayed sober 3 days; by the fourth week he was attending school 5 days and staying sober all week. This information was verified by his family and school.

At that point a 4-week family contract was drawn up among Chavo, his mother, and the paraprofessional. Family quarrels and chores at home were one focus. Since Chavo was involved in a gang, the plan was to develop behavior incompatible with gang activity, i.e., doing more at school, spending more time at home, letting his mother know where he was, and spending more time at the community center. The contract stipulated that in order for Chavo to stay out Friday nights until midnight, he must tell his mother when and where he was going, call home periodically, and do chores each day. During the first week Chavo called home 6 days and performed the other duties every day; by the fourth week he was performing all duties every day.

DISCUSSION

This program appears to be a viable model for training paraprofessionals and subsequently for community intervention for a wide variety of family problems, including alcohol abuse. The paraprofessionals learned the principles of behavior modification and continue to use them in their community agencies. Some have begun teaching these principles to and sharing workshop materials with their colleagues, who now seek them out as good resources. A few have begun to use these principles in dealing with situations in their own families as well as in measuring and modifying their own behaviors (e.g., smoking, weight control, and work habits). In addition, paraprofessionals from other agencies have called and requested an opportunity to be trained. Attrition presented a difficult problem in the implementation of this project. In assessing it, we discovered that the following factors contributed to the loss of paraprofessionals:

1. Differential capacity to assimilate the principles of learning and methods of behavior therapy.
2. Differential ability to maintain this highly systematic approach to treatment, i.e., maintaining a schedule for the time of study and keeping notes, graphs, records, and the like.
3. Competition among the trainees was such that a few paraprofessionals showed substantially more motivation and success.
4. The initial agreement for participation in the program was too informal; we feel that a formal contract

was needed for commitment to training.

In this preliminary project we began to learn how to work effectively with Mexican-American and black families in the urban areas of Los Angeles. From the vantage point of a large medical center, we were unaware of the nuances of family life in these communities. Even the indigenous paraprofessionals, who were more attuned to community life, had much to learn. For example, from our experience it appears that the Mexican-American father has difficulty accepting a non-family member into his home even though that person has a similar ethnic background; Chavo's father was also reluctant to admit there were family problems and to accept advice. Contracting with black families seemed easier; they more readily accepted strangers in the home and took suggestions from someone outside the family. Both kinds of families experienced strong competition from peer groups and gangs in efforts to improve their adolescents' behavior. Two gratifying findings that demonstrate generalization were that parents began using contracting with their other children and teachers began using these methods with other students.

We are encouraged by our findings. This training provided a structured model for the paraprofessionals' interventions with families in their communities. With the specificity of behavioral contracting methods, useful and concrete tools were provided that paraprofessionals are capable of learning and applying. In addition, they continue to use what they have learned in their community centers. This pilot program offers a fruitful model for the continued training of community-based paraprofessionals in family behavior therapy with alcohol-abusing adolescents.

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LETTERS TO THE EDITOR

Another Approach to Avoidance

SIR: Psychiatrists who are interested in the supervisory process cannot help but appreciate the contribution made by Marcia Kraft Goin, M.D., and Frank Kline, M.D., in "Countertransference: A Neglected Subject in Clinical Supervision" (January 1976 issue). However, I feel that the authors may have failed to recognize the sensitivity and perhaps the good judgment of the supervisors whom they were studying.

Countertransference is a very personal area for a resident and one about which the new resident is often quite defensive. I do not think it was "curious to observe this delicate handling of unspoken issues," as the authors noted. To the contrary, I suspect that since the supervisors had known the residents for eight months, they may have known what they were capable of handling at the time the tapes were made and in what manner. The indirect approach can be effective at times, especially in initially dealing with countertransference problems. At other times, relating the supervisor's experience in dealing with examples of countertransference may be especially helpful to the new therapist.

I find it striking that the authors did not seem to take into account the fact that the supervisory sessions were being videotaped. A discussion with the supervisors might have shown how much the video process itself and the resultant lack of confidentiality influenced their approach to countertransference in the sessions, as well as revealing other individual reasons. Perhaps the 50% of the supervisors who "neglected" the countertransference or those who directly avoided bringing in the residents' personal reactions were actually demonstrating a sensitivity to issues of confidentiality. If this were the case and the issues of countertransference were dealt with more openly when the camera was off, we might have a meaningful lesson that could be applied by the resident in dealing with patients' private data.

MICHAEL BLUMENFIELD, M.D.
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Dr. Goin Replies

SIR: I appreciate Dr. Blumenfield's thoughtful comments. It is certainly true that being recorded on videotape must have an inhibiting effect on a supervisor. We attempted to counteract this reaction as much as possible by videotaping all of the supervisors at least three times and then having them choose for study the tape that was most similar to their style when working without such an intrusion. Later discussions with the supervisors (we looked at each tape with the supervisor involved) showed that they did feel the sessions were representative of their usual meetings.

The fact that Dr. Blumenfield mentions the issue of confidentiality is indicative of the kind of inhibiting ideas with which the supervisor struggles. Talking about a resident's feelings and reactions to his/her patients need not lead to a revelation of intimate, confidential secrets. Often, residents believe that they should be without reactions or feelings toward their patients and that the emergence of countertransference means they have failed to be the perfect therapist. It is the naturalness of the supervisor in accepting and expecting reactions that frees residents from such a distortion. A supervisor's belief that such reactions cannot be openly talked about in a teaching session but rather belong to the confidentiality of therapy poses a dilemma for supervisor and resident.

MARCIA KRAFT GOIN, M.D.
Los Angeles, Calif.

A Question of Ethics

SIR: I am a lay person who subscribes to the *Journal*. I would like to describe a personal experience related to an aspect of psychiatric ethics that may interest those who read "Overview: Ethical Issues in Contemporary Psychiatry" by Fritz Redlich, M.D., and Richard F. Mollica, M.D. (February 1976 issue).

My mother was recently committed for treatment of paranoia. During the complicated legal process, she chose as an independent examiner a psychiatrist whom she had seen a few times in the previous three years. About two years before her commitment, I had written a letter to this psychiatrist, hoping to enlighten him about the situation in my parents' home and giving many details of my mother's behavior.

During his latest examination of my mother, he read her my letter. I realize he may have done it to convince her that others think she is ill, but it has caused me untold pain and forever deprived me of my mother's trust. He, in effect, threw me to the dogs.

NAME WITHHELD

"Equivalent" Doses in Medication Changes

SIR: We have been concerned with the tendency toward an almost routine use of increasingly high doses of antipsychotic agents (1) and have recently encountered a case that illustrates one acute complication of the rapid change from one agent to another at relatively high "equivalent" doses.

A 30-year-old man with an 8-year history of bipolar manic-depressive illness was admitted to a psychiatric hospital in an acute manic psychosis and was treated with up to 1500 mg/day of lithium carbonate (blood levels of 1.0–1.5 mEq/liter), 20 mg/day of haloperidol, and 2 mg/day of benztropine mesylate. The patient's mania partially improved, but his insomnia persisted. Haloperidol was discontinued on the 6th day of his hospitalization and chlorpromazine was started immediately at a dosage of 1200 mg/day. Over the next 72 hours, the patient's mental status worsened progressively and he became more agitated and aggressive. His thinking

became disorganized, with persecutory delusions, visual hallucinations, and referential thinking. His speech became dysarthric and incoherent. His pulse rate was 110 per minute, his pupils were 6 mm and poorly reactive to light, and his mouth was very dry. There was no fever. On the 10th day, chlorpromazine and benztropine were discontinued and the patient's apparently organic mental symptoms resolved gradually over the following 36 hours. The mania also continued to improve and the patient was discharged on the 21st day on 1200 mg/day of lithium carbonate.

This case represents the superimposition of an apparently organic mental syndrome in a case of mania. Various forms of combined toxic-functional psychosis are being recognized increasingly often (2). Many features of the mental status and physical findings in this case indicate that the mental syndrome included central anticholinergic toxicity (2), although lithium may have been a further contributory factor. This toxicity may reflect the combination of a small dose of benztropine with a large dose of chlorpromazine, which is about 48 times more potent than haloperidol as a blocker of central muscarinic receptors (3). It is commonly stated that the approximate clinical milligram equivalency of these two agents is 1–5 mg of haloperidol to each 100 mg of the phenothiazine (4); in the case we have reported, a ratio of 1.7:100 was used. However, this case shows that the milligram equivalency for antipsychotic effects need not correspond to that for acute toxic effects. Moreover, it illustrates the importance of time in the estimation of "equivalency" of different agents. That is, while it may be safe to change rapidly among dissimilar antipsychotic agents at low doses, antipsychotic medication change should be done more slowly and carefully at higher doses.

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ROSS J. BALDESSARINI, M.D.
Boston, Mass.

An Unfair Indictment of Behavior Therapies?

SIR: In his article "The Behavior Therapies: Therapeutic Breakthrough or Latest Fad?" (February 1976 issue), Arthur K. Shapiro, M.D., is critical of the APA task force report on behavior therapy (1). He takes issue with each of the nine points cited in the report as advantages of a behavioral approach to our field. I am sure that all members of the task force (myself included) would agree that many controversial issues raised by behavior therapy can be argued cogently from more than one point of view. Resolution of these issues will require much research, thought, and study. However, Dr. Shapiro's article did not deal with any of the issues adequately and will not add to the reader's understanding of them.

I will illustrate this with a single example. Dr. Shapiro takes issue with the report's thesis that "behavior therapy is applicable to both psychological and organic illnesses." He points out that behavior therapy techniques have been used to treat patients with Gilles de la Tourette's syndrome who would probably have been better treated with haloperidol. This of course may be true, and one can always find instances in which clinicians espousing a particular point of view have not used the treatment of choice for a particular patient. Patients with this syndrome are also sometimes treated by psychoanalytic psychotherapy, inappropriate drugs, and other means. However, this is no basis for the author's sweeping conclusion that behavioral techniques are not applicable to patients with "organic" illness. For example, one of the most clear and impressive applications of behavior therapy procedures is in helping the mentally retarded acquire self-help and social skills and generally improved adjustment (2). The same can be said of disorders such as chronic schizophrenia and infantile autism, which may indeed have their basis in neurophysiological or biochemical dysfunction. Of course, behavior therapy is not going to "cure" these conditions, but it may be very useful in maximizing functional capacity, facilitating rehabilitation, etc. (3). There is also a substantial literature on the use of behavior therapy techniques in treating some of the classical "psychosomatic" disorders such as bronchial asthma and migraine headache. Finally, there is a whole biofeedback literature. Although this area has more promise than fulfillment at this time, some solid clinical research results have been published in the management and treatment of a wide range of "organic illness" (4).

For all the above reasons, Dr. Shapiro's statement that "this concept [that behavior therapy is applicable to organic illness] is untrue, adherence to it may be harmful and occasionally is lethal, and it is often pragmatically irrelevant" is far more oversimplified and polemical than anything in the task force report. This article does not add to our understanding of the uniqueness or the limitations of a behavioral approach in psychiatry.

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JOHN PAUL BRADY, M.D.
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Dr. Shapiro Replies

SIR: I was surprised by Dr. Brady's statement that my paper did not contribute to the reader's understanding of some of the complex issues involved in evaluating the efficacy of the behavior therapies.

My paper focused on and was limited to a critical examination of the advantages described in the APA task force report on behavior therapy. Some of the points Dr. Brady has raised should be considered in future discussions. However,

these and many other issues that were not discussed in the task force report were excluded from my critique, in part because of space limitations. It would serve no purpose to repeat the arguments I presented in the paper, and the reader is referred to it for his own evaluation.

The effectiveness of the behavior therapies in managing and improving the functioning of mentally retarded, schizophrenic, and other patients would be an important contribution. However, further discussion and clarification is needed to determine whether these activities should be classified as clinical therapies. However classified, their effectiveness must be documented by more than clinical impressions or poorly controlled studies that are so subject to placebo effects and type I errors. The consequences can be more serious in the therapy of organic conditions, and the use of such techniques should be subject to the same proof required by the Food and Drug Administration for pharmaceutical agents.

I believe that behavior therapists should not ignore these issues. Many prominent investigators concerned with issues of psychotherapeutic efficacy in general have questioned the adequacy of the controlled evidence in support of behavior therapies. In a recent study, the best and most comprehensive study I am aware of, Luborsky and associates (1) could not draw any conclusions from the controlled studies in the literature comparing behavior therapies with psychotherapy. They also thought it important to limit their review to studies involving patients with "pervasive personality and adjustment disorders that lead them to seek psychotherapy." Since this work was done at the University of Pennsylvania, and Dr. Brady is cited as assisting in its preparation, it is curious that he ignored these results and conclusions in his letter. Similar questions have been raised about the adequacy of the current evidence for the effectiveness of behavior therapies by Wolfe (2), Bergin (3), and many other prominent investigators.

The clinical use of biofeedback, mentioned in Dr. Brady's letter but excluded from my paper, is thought by Engel (4), Basmajian (5), Shapiro (6), and above all by Miller (7), who largely originated the concept, to have far outdistanced the evidence for its clinical effectiveness.

My paper was not meant to lightly dismiss the importance of the behavior therapies; otherwise I would not have taken the time to write it or to have hedged about the conclusions that should have been obvious from careful perusal.

Although the paper was meant to be somewhat polemical (I see nothing wrong with this in science), its main purpose was heuristic. I am sorry that Dr. Brady did not see it that way and disappointed that he found nothing of value in it—if that were true, it would be difficult to understand why it was published.

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A Theory on "Psychogenic Polydipsia"

SIR: "Acute Psychosis, Increased Water Ingestion, and Inappropriate Antidiuretic Hormone Secretion" by Murray A. Raskind, M.D., and associates (September 1975 issue), sheds new light on so-called psychogenic diabetes insipidus.

I have encountered a variety of psychiatric conditions associated with polydipsia, but not always involving postmenopausal women (Dr. Raskind and associates' reports were of women over 50). One case was that of a 21-year-old woman seen within 2 months after an acute debut of undifferentiated schizophrenia with precipitating reactive factors. The patient was drinking 20–30 glasses of various fluids a day, but as soon as the neuroleptic treatment (150 mg/day of chlorpromazine and 20 mg/day of trifluoperazine orally) was instituted, the polydipsia disappeared.

Another patient was a 32-year-old man with a 6-year history of uninterrupted hospitalization for chronic schizophrenia followed by rehospitalization a year later for a paranoid relapse. The patient had been at home for the past few years despite his occasional aggressiveness, periodic severe regression, and persistently inappropriate behavior. He was drinking large quantities of tea, coffee, and soft drinks and vomiting soon after each ingestion. The patient denied any subjective thirst or dryness of mouth despite almost 10 years of continuous neuroleptic treatment.

A third polydipsic patient was a 40-year-old man who had been hospitalized following an ordeal caused by a shipwreck, rehospitalized, and for the past 8 years had functioned fairly well in a foster-home setting. Since his first hospitalization, he had been treated with large doses of neuroleptics. He suffered from unidentified seizures until adolescence and is mildly mentally retarded. His ingestion of large quantities of soft drinks led to bedwetting, presumably due to overflow incontinence. He displayed massive polyuria and nocturia and sweated profusely. Compulsive drinking and polyuria associated with progressively changing facial features suggestive of acromegaly prompted an investigation for pituitary tumor, with a negative result.

A fourth case was a 32-year-old man who was hospitalized 4 years ago for uncontrollable generalized seizures following a suicidal overdose of tranquilizers. A year later he was rehospitalized for a depressive episode, but he has been well controlled with anticonvulsants (120 mg of phenobarbital and 200 mg of diphenylhydantoin) and 30 mg of clorazepate dipotassium daily since. This patient habitually drank up to 50 cups of coffee a day.

In none of these cases has the hypothesis of inappropriate ADH secretion been tested.

I recall another case, that of a premenopausal woman in her early forties who was hospitalized for reactive depression with considerable anxiety and restlessness following a negative medical investigation of polydipsia. She had a vague history of head trauma many years before the onset of dryness of mouth that prompted her to drink up to a gallon of water daily. The diagnosis of Sjogren's syndrome was considered at some point but was eventually ruled out.

Head trauma as a factor occasionally precipitating

Schwartz-Bartter syndrome has been suggested by some (1). Caffeinism appears to be a related phenomenon in which the diuretic effect common to all methylxanthines triggers a vicious cycle of improper water balance. Heightened sympathetic tonus and adrenalinemia, presumably accompanying anxiety spells and chronic tension, probably fall into the same category. Drug-induced (anticholinergic) dryness of mouth may prompt excessive fluid ingestion, as does xerostomia associated with anxiety and depression through autonomic mechanisms. Pseudodysphagia experienced occasionally with globus hystericus is likely to induce repeated drinking to overcome the oropharyngeal spasm. A variety of other factors, from physical conditions of the environment to cultural phenomena, contribute to a faulty control of water balance on various levels and through various mechanisms.

I wonder how many cases of the heterogenous and heretofore obscure "psychogenic polydipsia" would be found to be related to inappropriate ADH secretion, if the hypothesis were tested properly.

REFERENCE

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ANDRZEJ KUBACKI, M.D.
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"Something More"

SIR: We found "History and Analysis of a Leaderless Group of Professional Therapists" by Winslow Hunt, M.D., and Amnon Issacharoff, M.D. (November 1975 issue), especially stimulating and moving because of our own experience in a leaderless couples group of psychotherapists and their spouses that began four years ago (1). The authors' descriptions were very candid and vivid, but we disagree with their implied conclusion that the failure of the group lay in its leaderlessness. It is our impression that the dissolution of the group was related to a failure to confront and work through the fundamental theme that brought the members together initially, i.e., the ennui in their personal and professional lives.

The overt reason expressed for the creation of the group was to discuss experiences and problems in group therapy work, but the covert emotional agenda appeared to be concerned with alienation from self and significant others. In fact, the authors noted that individual members were searching for solutions to this problem in various professional workshops and therapies. The initial task, however, dealt with an area of their lives in which they felt gratified and complete—psychotherapy. Not surprisingly, the first task was accomplished satisfactorily and gave way to a new focus, the process of the group. It seems to us that this new focus was also off the mark. The next period of the group came closer to the primary agenda and was an "idyllic time." The group became a place where members could bring their anxieties and confusions and find support. Had the group members been more in touch with and open about their reasons for being there, they might have continued as a support group, and the limits of the gratifying potential of others within the group itself might have become clarified. It appears that the searching continued, however, and the group attempted to mobilize a therapy focus to achieve what seems to us to be gratification of the ungratifiable; when they asked for "more," hostility and dissension appeared. We agree with the authors' speculation that the group members may have "simply wanted a closer, more supportive community than any of them had." The decision to end the group appeared to be an angry response to a lack of gratification rather than frustration over the failure to find a group leader.

The proposition that a group leader might have been that "something more" seems to be an extension of the expectation that some higher power—if not the group itself, then a group leader—could provide complete gratification, or at least a release from the ennui of life.

It has been our experience that a leaderless group of professionals can be a viable reference group for professional and personal anxieties and that when spouses and children are integrated into the group experience a type of extended family is formed that provides a buffer for the alienation hazards of the profession. Perhaps if the members of the group described in the article had attempted to integrate into the group experience "the intimate relationships that really mattered most to them—with wives, lovers, and children" they *could* have had something more. Even here, however, group members have to adapt to the frustrating experience of not getting all they want.

REFERENCE

1. Pepitone-Rockwell F, Rockwell D, Derrico M, et al: Three years in a leaderless couples group. Presented at the 128th annual meeting of the American Psychiatric Association, Anaheim, Calif, May 5–9, 1975

CARLYLE FOLKINS, PH.D.
JAMES SPENSLEY, M.D.
FRAN PEPITONE-ROCKWELL, PH.D.
Sacramento, Calif.

Drs. Hunt and Issacharoff Reply

SIR: We did not wish to imply that every group needs a leader who is so labeled. Most groups need a leader in fact but not necessarily in name. One of the papers referred to in our article described a group that lasted 15 years without a formal leader. However, when the authors examined the group process in retrospect, they discovered that one person *had* served a leadership function.

We do not think that the leadership function need be embodied in any one individual—it can move from person to person or be contained in the relationship of the group to an outside institution or idea. What we are saying is really very simple. Anything that is going somewhere needs a steering mechanism. This seems too obvious to require emphasis, but we suggest that any leaderless group make sure that its steering mechanism, whatever it may be, is intact and working.

Dr. Folkins and associates comment that "dissolution of the group was related to a failure to confront and work through . . . the ennui in their personal and professional lives." Our failure to work certain things through was, we hope, clearly acknowledged in the article; the issue is why this was the case. Dr. Folkins and associates seem to hold what one might call the "better people theory" to explain the difference between our two groups. Their group worked and ours did not because the members of their group tried harder or were more honest or less demanding than the mem-

bers of our group. We think that this theory has limited explanatory power. In thinking about our own experience, we attempted to go beyond the admitted limitations and faults of the group members as individuals and to explain what happened in a more structural sense by exploring the setting, form, and process of the group. This led us to the formulation that relative to the task we needed to perform (to change the basic contract and raison d'être of the group), we did not have a leadership function of sufficient power.

At no point do Dr. Folkins and associates refer to their group as a therapy group. We think it is significant that they use the terms "reference group" or "support group." Their group may very well be functioning well as a support group, i.e., a group in which the positive and binding emotions are articulated and expressed and in which there is repression (and wisely so) of envy, rivalry, narcissistic rage, and other hostile emotions that exist in all human beings and that tend to break up the bonds between individuals if expressed. Our group members were ambitious in wanting to become a true therapy group, i.e., one that also dealt in depth with the negative emotions. Would that we had settled for being a support group!

Dr. Folkins and associates refer to our statement that "group members were without exception very committed to the practice of psychotherapy and it was a major source of gratification, albeit one that most took for granted." In a personal communication, Dr. Leon Balter has pointed out that this statement may be a defensive denial of an unresolved group issue. He called to our attention the universality and significance in the lives of all psychotherapists of guilt, both justified and irrational, for injuring their patients or for not helping them enough. The wish to deal with this guilt may have been a more important part of the secret agenda of the group than we recognized, and our failure to deal with it may have been important in the life of the group. This suggests that the group members may have projected that guilt onto the leader whom they refused to create or find in their own consciences (i.e., that if we ever found a leader he would take us to task for our failures with patients).

Since our article was published, many psychotherapists have spoken to us about their own experiences with small, informal, emotionally supportive groups of colleagues. It has become clear to us that intensive psychotherapy places emotional demands on its practitioners such that they have on almost universal need for a supportive group beyond what is provided by the formal institutions of the profession. This need has probably been experienced and responded to since the very creation of our calling when in 1902 Freud started his psychological Wednesday evenings.

WINSLOW R. HUNT, M.D.
AMNON ISSACHAROFF, M.D.
New York, N.Y.

Capgras Syndrome: A Case Involving Violence

SIR: There has been an increase recently in reports of Capgras syndrome, including several cases in men (1–4). The following case, although not entirely classic, is interesting in that it involves a serious violent episode and also illustrates the dynamics of the syndrome.

A 32-year-old man got into difficulty at work and returned home to his parents, who had exerted pressure on him regarding his job. His parents had also criticized his fiancée, which made him feel inadequate. He became convinced that his parents were not his real parents but rather had stolen him from his real mother when he was young. He remembered his mother once stating angrily that she did not want him as her son and that he was not her son. He felt that his parents had been replaced by machinelike beings who had been suppressing him all his life.

As a result of his behavior, his parents made an unsuccessful attempt to place him in a hospital outside his catchment area. The patient thought he had been evaluated at the hospital by a homosexual attendant and therefore believed that his parents were trying to make him into a homosexual. Upon returning home the night of this evaluation, he went after his parents with a meat cleaver and seriously injured his mother. He believed that this act would free him from these impostor parents and remained convinced of this for some time after the event.

This episode in a paranoid schizophrenic man illustrates how homosexual panic and unacceptable anger toward his mother were dealt with by the delusion that his parents had been replaced by impostors. Tragically, this delusion caused him to seriously injure his mother. This case illustrates the development of a form of Capgras syndrome that enabled a man to perform an uncharacteristic violent act.

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ROBERT WEINSTOCK, M.D.
Cambridge, Mass.

Treating Depression in Patients with Cardiovascular Problems

SIR: A basic problem with clinical psychopharmacology of which I have become acutely aware in reviewing some of the literature is the problem of endogenous or psychotic severe depression in patients who have cardiovascular problems, specifically arrhythmias or atherosclerotic heart disease with arrhythmias. The problem is often one of deciding which illness one should treat, the cardiovascular problem or the depression. Unfortunately, we are often unable to make a clear decision because the two conditions are equally life threatening. It seems to me that the most obvious problem involved in giving psychotropic medications for depression is adrenergic stimulation, which clearly has detrimental effects on cardiac arrhythmias and hypertension. I would like to share a clinical vignette of such a problem that I encountered when I was a psychiatric consultant to the renal unit at an Army medical center.

The patient was a 58-year-old man who was suffering from chronic renal failure, was on chronic hemodialysis, and also had underlying atherosclerotic heart disease with irregularly occurring episodes of sinus tachycardia. He was hospitalized because of complications in maintaining his diet and regular dialysis. Because of the underlying serious depression, he had become agitated and more depressed in the hospital and

began expressing strong suicidal ideation. Despite supportive psychotherapy, his condition was not improving and it was decided that some form of antidepressant medication had to be administered (with all his other problems, ECT was considered to be contraindicated). Before my arrival on the ward as consultant, the patient was started on very low doses of amitriptyline; after two days, he suffered a cardiac arrest. He was resuscitated but continued to have evidence of cardiovascular problems. He was still quite depressed, had all the usual vegetative signs of depression, including insomnia, agitation, early morning awakening, refusal to eat, weight loss, and serious feelings of guilt and worthlessness.

I reached back into my medical experience to try to come up with a solution. The attending internist and I both agreed that the patient definitely needed treatment for his depression because he was clearly capable of killing himself. Therefore, we decided that whatever novel approach we might take with this problem would be justifiable. Upon obtaining informed consent from both him and his spouse, we placed him on 10 mg of propranolol four times a day and after 24 hours started him on imipramine in very low doses (10 mg four times a day) and gradually worked our way up to 75 mg of imipramine and approximately 40 to 59 mg of propranolol a day. After approximately 10 days on this regimen, the patient's mood began to improve markedly, his cardiac arrhythmia was in good control, his appetite returned, and he was sleeping well. After approximately 20 days, his depression was in good remission and his cardiac status was also stable. He was subsequently able to be discharged from the hospital, was much more cooperative in his diet and hemodialysis program, and was followed up by the psychiatric service with supportive psychotherapy and medication regulation.

Although there are many theoretical objections to the concept of using a tricyclic and a β-blocking agent such as propranolol (i.e., the resultant excess α-adrenergic stimulation that might result), it was my experience that this combination is quite safe and may give us the margin of safety we need to treat seriously depressed patients with cardiac problems who otherwise might be beyond our reach.

R. MICHAEL ALLEN, M.D.
Killeen, Tex.

A Fair Comparison?

SIR: I read "Comparison of Two Five-Year Follow-Up Studies: 1947 to 1952 and 1967 to 1972" by J. Sanbourne Bockoven, M.D., and Harry C. Solomon, M.D. (August 1975 issue), with concern because the authors did not seem to have provided any evidence to support their conclusions. It should go without saying that one must compare like with like if a comparison is to have any validity. In fact, the groups the authors described differ significantly in practically every area mentioned.

First, the Boston Psychopathic Hospital patients were very selectively derived from a large and widespread population, while the Solomon Mental Health Center patients came from a compact urban sector and were presumably much more representative of the mentally ill in their area. Second, the relative proportions of patients in the two groups who had or had not had a previous admission are entirely different. Third, the relative proportions in the various diagnostic categories are also quite different. I also presume (although we are not told enough about this point) that the Solomon Center is rather more representative of mental health facilities in the United States than the Boston Psychopathic Hospital, an exceptionally well-staffed postgraduate teaching hospital.

All of these differences are in addition to those specifically mentioned by the authors, and it is really not accurate to state that the two groups were "random samplings of admissions from their respective communities." Clearly, they were anything but that.

These deficiencies of method are most serious in relation to the authors' conclusion that "psychotropic drugs may not be indispensable to the success of community-based mental health services and that their extended use in aftercare may prolong the social dependence of many discharged patients."

The Solomon Center patients included 33 with "miscellaneous" diagnoses (personality disorder, psychoneurosis, etc.) compared with 6 patients so categorized in the Boston Psychopathic Hospital Group. Obviously, the responses of these patients to psychotropic medication will be considerably different from those of patients with a diagnosis of schizophrenia or affective psychosis, and the overall experience of the two groups will vary correspondingly.

This point concerns me particularly because I have been engaged for the past nine years in examining the effect of long-acting fluphenazine medication in schizophrenics derived from a defined population of 125,000 recorded by the Salford Psychiatric Case Register (1) and treated by a community-based psychiatric service. The mirror-image method uses the patients as their own controls and the sample now consists of 252 patients, all of whom had had at least one admission before the treatment regime was commenced. The minimum follow-up is one year. (The methodology of this study has been described more fully elsewhere [2].) This sample had a total hospitalization of 14,889 days before the injection regime was started, compared with 4,143 days after the injection treatment began, other significant factors being constant. Treatment is currently maintained in all cases.

Hospitalization is a very imperfect measure of morbidity, but if it is to be used at all, it cannot support the view of Drs. Bockoven and Solomon toward psychotropic drugs in the community management of schizophrenia.

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HUGH L. FREEMAN, F.R.C.P.
Lancashire, England

Drs. Bockoven and Solomon Reply

SIR: We are especially pleased by the interest evoked by our article. Dr. Freeman's letter merits particular comment. Our point in writing the paper was to present evidence that the older and still persisting pessimistic psychiatric view of mental illness is unwarranted and unacceptable. We do not consider the details of our statistical approach to be the important issue. We do consider 100 unselected consecutive ad-

missions to be reasonably representative of admissions to the two facilities. Indeed, we regard the rather similar outcomes of the two studies to be of added interest precisely because of the differences between two samples of people who shared the factor of being regarded as disturbed enough to be admitted to a mental hospital.

We feel that it is extremely important that studies similar to ours be done at many different locations in the world. It is of special importance to conduct studies designed to learn why some illnesses are long term and others are not.

In regard to psychotropic drugs, we find it interesting and worthy of note that the outcome of the two programs was so similar, given that one used such drugs extensively and the other did not use them at all.

J. SANBOURNE BOCKOVEN, M.D.
HARRY C. SOLOMON, M.D.
Lowell, Mass.

Homeopathic Dosage in Maintenance Therapy

SIR: In "Overview: Maintenance Therapy in Psychiatry: I. Schizophrenia," John M. Davis, M.D., emphasized the value of antipsychotic maintenance medication in the prevention of relapse. He also reviewed the article by Paul and associates (1) and said that many of the patients in their study were receiving homeopathic doses of neuroleptics, so that in effect the study was comparing ineffective doses with no drugs. If one examines the original study by Paul and associates, one will realize that a basic, if not the most basic, point of that study was that many patients *are* in fact treated with homeopathic doses, with the prescribing physician believing that he is preventing a relapse.

I think Dr. Davis should reemphasize the point that there are placebo doses of antipsychotics that have *no* beneficial effect on behavior or on relapse. This is particularly important in light of the side effects (cataracts, tardive dyskinesia, etc.) that can occur even with low doses of antipsychotics. What should be stressed is that the relapse rate for schizophrenics is high and very long-term follow-up is therefore the rule, but within that framework, few or no homeopathic dosages should be used.

REFERENCE

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GEORGE MIDDLEKAUFF, M.D., PH.D.
Chicago, Ill.

Dr. Davis Replies

SIR: I agree with Dr. Middlekauff that some patients treated with homeopathic doses are essentially receiving a placebo dose and the drug should be completely discontinued to avoid long-term side effects. I provided evidence in support of this opinion in part I of my overview (December 1975 issue, pp 1242–1243), particularly in table 2. The results of the Paul and associates study, although consistent with this, do not provide compelling support for it. Some of the patients in their study were treated with tricyclic antidepressants, which may exacerbate schizophrenia and in any case would not have any prophylactic properties. Because these patients were not eliminated from the study, confounding effects of the tricyclics make the results uninterpretable as presented. Most importantly, however, these authors used the wrong statistic. Their analysis of the data was confounded in the classical sense. Without the proper statistics, it is impossible to interpret their findings.

Although I do agree that some patients treated with homeopathic doses probably do not need the medication and it probably should be discontinued entirely, I have also seen patients who do experience good prophylactic effects on what seem to be very low doses of neuroleptics and who do predictably relapse when these doses are discontinued entirely. Thus, I do not feel that *all* patients on low doses are being treated with placebo doses, but I suspect that some are. As I stated in my overview, I feel that medication should be reduced from time to time for chronic patients, and sometimes complete discontinuance is called for in order to determine empirically whether or not they still need maintenance medication.

JOHN M. DAVIS, M.D.
Chicago, Ill.

Maintenance Therapy Guidelines

SIR: I wish that John Davis, M.D., in his article "Maintenance Therapy in Psychiatry: I. Schizophrenia" (December 1975 issue), had emphasized the fact that many patients do not need maintenance therapy. He does mention this in several places, but it is buried in the text of his excellent paper rather than being prominently displayed.

It is well known that neuroleptics can cause permanent and serious side effects, especially tardive dyskinesia and ophthalmological problems. The data that Dr. Davis presented show that anywhere from 0 to 82% of the patients studied had not relapsed by the end of the study period. Investigations that have covered an extended period of time (e.g., 1) have shown that some patients may have one psychotic episode and never relapse.

Because I am loath to take the risk of inducing these long-term side effects unnecessarily, I attempt to predict whether or not the individual is likely to experience another psychotic episode. Unfortunately, there is no sure way to do this. Empirically, I have found that the only predictor I can use is the presence of previous psychotic episodes.

With this in mind, I use the following protocol for maintenance treatment of schizophrenics. If the psychotic episode was the first for the patient, I continue neuroleptics for nine months following cessation of psychotic symptoms and then gradually discontinue the dose, followed by 6–12 months of observation. If it is the patient's second psychotic episode, I follow the same procedure, but I use 2 years of medication and a follow-up observation period that varies depending upon the symptom-free interval, with a minimum period of 12–18 months. If the patient has had three or more psychotic episodes, I continue him on medication for life, with a dosage reduction to the minimum necessary to prevent psychotic symptoms. In such long-term maintenance, I institute drug holidays, at first over weekends. I use a similar protocol with patients who have had major depressive episodes and are on tricyclic antidepressants.

I would like to emphasize that I have only impressionistic evidence that this protocol works. I would certainly appreciate any comments other practitioners may have about this protocol or about their usual drug maintenance practices.

REFERENCE

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KENNETH SOLOMON, M.D.
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Dr. Davis Replies

SIR: My suggestions as to the indications for maintenance therapy are quite similar to Dr. Solomon's and were discussed in my section on clinical issues, which is followed by a lengthy section on prevention of long-term side effects. I said essentially that I do not advocate maintenance medication in the first episode of reactive schizophrenia and would only use it when there is some indication that the patient suffers from a chronic relapsing disease. I differ somewhat from Dr. Solomon in that I do not advocate treating patients for life but rather feel that patients should undergo trials of lower doses. If they do not relapse, a trial of complete discontinuance of drugs is in order to determine empirically whether they in fact need to continue medication. This can be done without great difficulty in the hospital, but on an outpatient basis one sometimes has to carefully weigh risks and benefits. Dr. Solomon's rules for discontinuance seem reasonable. In my presentation I reviewed the general principles behind discontinuance rather than providing a specific prescription, and I pointed out that I do favor individualization of the treatment options.

JOHN M. DAVIS, M.D.
Chicago, Ill.

A Clarification

SIR: The recent overviews on maintenance therapy in psychiatry by John M. Davis, M.D. (December 1975 and January 1976 issues) provided an extremely valuable synthesis of widely scattered data on lithium carbonate, antidepressants, phenothiazines, and related agents. Dr. Davis' integration of these data into a comprehensible whole is of immense value to the practicing psychiatrist who treats chronic or recurring psychiatric disorders.

However, part II, which deals with affective disorders, contains what I believe to be an error. Dr. Davis states,

> The combined probability that lithium has a prophylactic effect in comparison with placebo or a previous treatment is 6×10^{-11} for recurrent depressive disorders. In a similar manner one can combine the probabilities from the various studies for bipolar disease: the probability that lithium prevents recurrence of a bipolar disease in comparison with no lithium is 3×10^{-24}.

While the context makes it clear that Dr. Davis is speaking of the probability that the results observed in all of the studies summarized in table 2 would occur *by chance alone*, the statement as it stands suggests that there is a minuscule probability that lithium has any prophylactic effect. In the interest of exactness (which otherwise characterizes these fine articles), I believe the statement should be amended to reflect its actual meaning.

DUGALD D. CHISHOLM, M.D.
Los Angeles, Calif.

Dr. Davis Replies

SIR: I agree that adding the phrase "by chance alone" would have been a more explicit expression of the concept intended.

JOHN M. DAVIS, M.D.
Chicago, Ill.

ECT as Maintenance Therapy in Schizophrenia

SIR: "Overview: Maintenance Therapy in Psychiatry: I. Schizophrenia" by John M. Davis, M.D. (December 1975 issue) is a well-done review of the literature. However, the article fails to mention convulsive therapy as a form of maintenance therapy for schizophrenia.

Convulsive therapy was first used to treat schizophrenia but has since been used predominantly in the treatment of affective disorders because they are more exquisitely sensitive to its therapeutic action. Kalinowsky (1) has reported a remission rate of 80.4% in acute schizophrenic episodes of less than six months' duration. He found a relapse rate of only 11% in six months to two years following discharge. The usual frequency of maintenance ECT treatment for schizophrenia is once a month (1).

We have been treating a number of schizophrenic patients with ECT to control their symptoms. After they have responded to a course of ECT, these patients are followed closely in individual therapy. Those who develop early symptoms signifying the beginning of a relapse are given ECT on an outpatient basis and have had amelioration and/or disappearance of their symptoms. This regimen has aborted psychotic episodes and obviated the need for hospitalization and maintenance medication; it also confirms Kalinowsky's observation (1) that patients who respond initially to ECT usually respond to it again when so treated for a relapse.

There is another reason for considering ECT for the treatment of schizophrenic disorders—the risk of tardive dyskinesia as a side effect of neuroleptics, an issue Dr. Davis addressed. Most cases that have been reported are in older females given large doses of neuroleptics, and they are irreversible. There has been an increasing number of reports about younger people who have been taking this medication for less than six months (2). We have recently seen two such patients. Both were women under 40, and one had been taking the medication for less than one month prior to developing dyskinesia. Neuroleptics are far from innocent drugs. A patient successfully treated with ECT is not in danger of developing tardive dyskinesia.

There are many other situations where neuroleptics are

contraindicated or carry strong reservations, e.g., during pregnancy, when a patient is concurrently taking certain antihypertensive medications, or when there is evidence of hepatic impairment, renal insufficiency, or cardiovascular disease (3). In all of these situations, ECT would be safer than neuroleptics.

We feel that ECT as a form of therapy in schizophrenia has been neglected not only in Dr. Davis' overview but also by practitioners in general. With the introduction of the phenothiazines in the 1950s, there was a profound decrease in the use of ECT for the treatment of schizophrenia. We would like to suggest that discarding the use of ECT and unequivocally embracing the phenothiazines was premature and unwarranted.

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GREGORY ASNIS, M.D.
ARTHUR N. GABRIEL, M.D.
New York, N.Y.

Encephalopathy and Psychiatric Diagnosis

SIR: In "Viral Encephalopathy Mimicking Functional Psychosis" (February 1976 issue), Lawrence G. Wilson, M.D., cautioned psychiatrists against accepting a diagnosis of schizophrenia "for an acutely psychotic patient without careful consideration of alternative explanations." He reports on three patients initially diagnosed as having catatonic schizophrenia who were subsequently found to be suffering from an organic psychosis.

I should like to caution psychiatrists to be wary of accepting a diagnosis of "viral encephalopathy" for patients in whom neither the infectious nature of the process nor its viral etiology has been firmly established lest "viral encephalopathy" become nothing more than a cliché concealing our ignorance of acute encephalopathies of unknown causes. The three patients Dr. Wilson described undoubtedly suffered serious organic brain disease, but its viral or infectious nature remains unproved.

The patient in case 1 became febrile only after choking and aspiration and developed spinal fluid pleocytosis only after a bloody spinal tap, gram-negative sepsis, and ECT. The rise in serum antibody titer for herpes simplex virus may have reflected only activation of a latent process. The second patient had a negative brain biopsy pathologically and negative viral cultures of brain matter at a point in the disease process when a positive culture might have been expected. Furthermore, if my interpretation of the case report is correct, the patient showed elevated cerebrospinal fluid (CSF) cells (to a maximum of 10) only after the brain biopsy. The third patient became febrile only after developing pneumonia and had increased CSF cells (to a maximum of 8) only after status epilepticus. Thus in none of these cases was a viral or infectious origin clearly established.

Certainly the history and clinical picture of each of these patients is compatible with a diagnosis of viral encephalopathy, and if one is compelled to assign a diagnosis, this choice should not be condemned. To accept this diagnosis without firm evidence, however, seems similar to accepting the diagnosis of schizophrenia without considering alternatives. It precludes interest in an investigation of acute encephalopathic processes of unknown cause. In this instance, I would like to join Dr. Wilson in suggesting that we expand the horizons of our inquiries.

CHARLES E. WELLS, M.D.
Nashville, Tenn.

SIR: Dr. Wilson's article created much interest from our staff because of a similar case on our service. As with Dr. Wilson's case, our patient presented with mental status findings of acute schizophrenia and without laboratory evidence of encephalopathy. Our patient did have a subtle defect in naming common objects, but this was initially attributed to anxiety. At no time did he exhibit fever. Two EEGs, skull films, and brain scan were normal. Lumbar puncture on the 10th hospital day demonstrated opening pressure of 170 mm of water with 2 red blood cells, 2 polymorphonuclear leukocytes, and 4 lymphocytes. Protein and glucose were normal. The patient's acute psychosis gradually disappeared over 3 weeks. His nominal aphasia persisted and became more obvious as the "thought disorder" ended. After 5 weeks of hospitalization, all clinical and laboratory tests were completely normal and the patient returned to military duty.

Such cases appear to be unusual presentations of encephalitis—but could these illnesses represent one subset of etiologies for acute schizophreniform psychoses? Certainly, more patients admitted with acute psychoses should receive spinal fluid examinations and viral serologic studies to rule out encephalopathy.

LT. CDR. ROBERT MALCOLM, MC, USN
Charleston, S.C.

Dr. Wilson Replies

SIR: Dr. Wells raises valid objections against presuming that for which we have minimal evidence. Definitive evidence of a viral or infectious etiology is lacking in my cases 2 and 3 and is only suggestive in case 1. We had close collaboration with our neurology colleagues on all 3 of these cases and relied on their clinical experience to a very large degree. When they said, "These cases are very similar to proven cases of herpes encephalitis that we have seen, although we lack definite evidence," we accepted their presumptive clinical diagnosis. I agree with Dr. Wells that "encephalopathy of unknown cause" or "*presumed* viral encephalitis" would have been a more accurate description of the cases and a more accurate title for the paper.

Dr. Wells notes that in cases 1 and 3 small numbers of lymphocytes appeared in the spinal fluid only after the occurrence of rather severe systemic illness, a bloody spinal tap, ECT, and status epilepticus. However, in case 2, Dr. Wells interprets the small elevation of CSF lymphocytes to 10 as occurring only after brain biopsy had been performed. Although the temporal sequence is somewhat unclear in the

case report, this finding occurred on the 10th *total* hospital day, which was the 3rd day after referral to the university hospital and preceded the brain biopsy.

I hope, like Dr. Wells, that more sophisticated serologic and other laboratory studies will enable these very complex cases to be more accurately and specifically diagnosed in the future. From the perspective of the psychiatrist, however, whether the specific diagnosis is known or not, the general problem of an organic and possibly infectious brain disease "masquerading" as a functional psychosis raises very difficult questions in clinical management.

Dr. Malcolm's letter suggests that acute organic psychosis of undetermined etiology may be much more common than we had previously believed. Undoubtedly, many cases similar to his have been signed out as "acute schizophrenic episode, in remission" because discrete aphasias or mild disorientation were not searched for and therefore not discovered. A Canadian investigator (1) doing postmortem brain stem examinations of mental health patients and general hospital control subjects recently reported some related findings. Unexpectedly, he found glial nodules and perivascular infiltration—which he felt were suggestive of an encephalitic process—in six of seven patients diagnosed as schizophrenic but in none of the controls. As Pincus and Tucker (2) pointed out, more and more of these "schizophreniform" psychoses will probably be found not to be "functional" at all, but instead of very definite organic etiology.

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LAWRENCE G. WILSON, M.D.
Seattle, Wash.

A Methodological Question

SIR: In "Antiparkinsonian Agents and Fluphenazine Decanoate" (January 1976 issue) Scott Idzorek, M.D., discussed 19 patients receiving fluphenazine decanoate, presented data on incidence and severity of extrapyramidal symptoms, and drew conclusions about the use of antiparkinsonian agents and the comparative value of fluphenazine decanoate and enanthate preparations. It is difficult to understand how the data yield these conclusions, since the patients were initially unmatched and there are no data to suggest that they were comparable to the patients in the cited study of Chien and associates (1). Specifically, the patients "fell into three groups with respect to the use of antiparkinsonian agents," receiving the antiparkinsonian drug daily, irregularly, or not at all. The three groups are compared, but the critical question of how patients gained entry into these groups is not clarified. It seems that they were not randomly assigned, yet clinical criteria for use of an antiparkinsonian agent are not described. Furthermore, if patients "fell" into their respective groups because of clinical need, then they were preassigned (from the standpoint of this study) based on their susceptibility to extrapyramidal reactions.

It is somewhat puzzling that the uncontrolled data in this publication are considered novel, especially since there are a number of studies (some double-blind) that more adequately address the same question (2–6). A recent review (7) presented the possible pharmacological explanations for the differences between the enanthate and decanoate preparations of fluphenazine (8–10).

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ALAN J. GELENBERG, M.D.
MICHAEL R. MANDEL, M.D.
Boston, Mass.

Dr. Idzorek Replies

SIR: The 19 patients in my study were referred to a fluphenazine clinic for the purpose of attempting to better control their psychotic symptoms. In general, these patients were characterized by a long history of schizophrenia, previous psychiatric hospitalizations, a history of not taking oral psychotropic medication as prescribed, and poor social adjustment. The primary concern was to treat each patient's psychotic condition; the collection of data on the incidence and severity of extrapyramidal symptoms was a secondary priority.

All patients were given fluphenazine decanoate in the lowest dosages necessary to control psychotic symptoms. Patients who were already receiving an antiparkinsonian agent when they were referred were initially kept on this medication; a portion of these patients were ultimately taken off the antiparkinsonian agent. Patients who were not receiving an antiparkinsonian agent at time of referral were not given one unless significant extrapyramidal symptoms developed.

After data were collected, it was noted that the patients could be divided with respect to the use of an antiparkinsonian agent into three groups—those who had used an antiparkinsonian agent daily, those who had not used an antiparkinsonian agent, and those who had used an antiparkinsonian agent during a portion of the study.

The results reported by Chien and associates (1) on patients receiving fluphenazine enanthate indicated a higher incidence and intensity of extrapyramidal symptoms than the results reported in my study. Although methodological differences make it impossible to directly compare our respective results, I feel that there are enough important similarities between the two studies to permit at least a general comparison. These similarities include the type of patient (chronically psychotic), the use of a depot fluphenazine medication on a periodic but regular basis, and a common rating scale to evaluate extrapyramidal symptoms.

I made no attempt in my article to explain the differences in the results of these two studies. Such a discussion would be a valuable topic for future communications.

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SCOTT IDZOREK, M.D.
Phoenix, Ariz.

Thiothixene and the Postpsychotic Depressive Syndrome

SIR: I read "An Investigation of the Postpsychotic Depressive Syndrome" by Thomas H. McGlashan, M.D., and William T. Carpenter, Jr., M.D. (January 1976 issue) with particular interest because I recently treated a patient who presented a classical picture of this syndrome. She was admitted to the hospital in a florid psychotic state of sudden onset. She was grossly delusional, thinking that she was possessed by the devil and otherwise persecuted. She had auditory hallucinations, incoherent speech, marked thought disorder, severe agitation, and incongruent affect. She was given 30–40 mg of haloperidol daily with rather dramatic results. Her psychotic symptoms were quickly brought under control, and within 10 days she was practically symptom-free except for mild depression. She was discharged on 20 mg/day of haloperidol plus 6 mg of benztropine mesylate.

Within a few days, however, her depression worsened, she was crying for no apparent reason, and she became preoccupied with suicidal ideas. She felt hopeless and decided to take an overdose. At this point, she was rehospitalized, and her medication was changed to 40 mg of thiothixene daily. She responded very well to the change of medications—her symptoms of depression gradually improved, she was no longer suicidal, her spirits improved considerably, and she developed an optimistic outlook. She was discharged from the hospital in three weeks in very good remission—except for some anergia that persisted for a time, she was completely back to her normal self. Her thiothixene dosage was gradually reduced to 10 mg/day.

In view of the fairly well-documented antidepressant effects of thiothixene (e.g., 1, 2), I wonder if it could be regarded as the treatment of choice for postpsychotic depressive syndrome (PPD). It would also be interesting to see if thiothixene could be used as a preventive measure in the initial treatment of patients who seem likely to develop PPD.

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V.F. OGNYANOV, M.D.
St. Louis, Mo.

Drs. McGlashan and Carpenter Reply

SIR: We were pleased with Dr. Ognyanov's interest in our article, and the case he presents certainly fits the postpsychotic depressive syndrome phenomenologically. On the basis of a single case, however, we feel it is difficult to conclude that any drug (in this case thiothixene) can be regarded as the treatment of choice in PPD.

In a review of the literature on PPD (1), we found only one systematic study of its treatment with drugs (tricyclic antidepressants and phenothiazines) (2); the results were inconclusive at best. Few data are available to guide the clinician as to the preferred pharmocologic treatment for PPD. In the face of depression during the resolving phase of psychosis, Detre and Jarecki (3), Klein and Davis (4), and Ayd (5) suggest that the addition of a tricyclic antidepressant to the patient's phenothiazine regimen may be useful in selected cases.

It is also important to remember that depression following psychosis may be the *result* of drug treatment during the acute phase, as was suggested by our study and several others in the literature (5–10). It is possible, for example, that the depression of Dr. Ognyanov's patient was somehow linked to the use of haloperidol. If so, her recovery from depression may have resulted from the discontinuance of this drug rather than the addition of thiothixene.

Clearly, an attempt should be made to estimate the origin as well as the severity of any case of PPD. Such an exercise in differential diagnosis often clarifies the necessary therapeutic action. Cases that seem to represent a side effect of neuroleptic medication may be treated by cessation of drugs, change of medication, or the addition of antiparkinsonian agents. Cases that are prolonged and closely mimic a picture of endogenous depression may respond to the addition of an antidepressant drug. Finally, many cases of "depression" following psychosis represent an appropriate—and adaptive—grief response to the personal crisis of psychosis. For such patients, somatic treatment may actually be antitherapeutic (11). Supportive or expressive psychotherapy without drugs would be the optimal approach in such cases.

At the present state of our knowledge, each patient with PPD must be evaluated individually according to his needs and the physician's clinical judgment. General statements regarding the most efficacious treatment approach to PPD, however, must come from further systematic investigations.

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THOMAS H. MCGLASHAN, M.D.
WILLIAM T. CARPENTER, JR., M.D.
Rockville, Md.

"Postmanic Traumatic Neurosis"

SIR: I read with great interest "An Investigation of the Postpsychotic Depressive Syndrome" by Drs. McGlashan and Carpenter and the "Discussion" by Joel Kotin, M.D. (January 1976 issue). I have described a similar condition following mania (1) that I see as a traumatic neurosis. I recommended treatment through psychotherapy.

Treatment of the traumatic neuroses of bipolar illness cannot burden the patient with the responsibility for his illness, which is genetically determined and biochemically mediated, unless it is hypothesized that intrapsychic or interpersonal stress precipitated the illness. Dr. Kotin holds that the patient must accept the burden of responsibility in schizophrenia. I know of no scientific evidence that the cause of schizophrenia is any more the patient's responsibility than that of bipolar illness.

Many of my patients with postmanic traumatic neurosis accused me of trying to make them into an "outsider" (2) because I did not give them hope that they could change their own biochemistry and genes by magical thinking or psychotherapy. I see much of the depression in the postmanic traumatic neuroses as the same depression H.G. Wells felt in *Mind at the End of Its Tether*, when he realized he could not change the facts of the world (3).

I am at present preparing a manuscript further discussing my experiences in psychotherapy with bipolar patients.

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ROBERT BENSON, M.D.
Seattle, Wash.

Dr. Kotin Replies

SIR: Dr. Benson's chief complaint seems to be my use of the word "responsibility," which I quoted, in admiration, from Semrad and Zaslow (1). Dr. Benson is reacting as if I wanted to blame the patient. I meant quite the opposite. Guilt, self-blame, and "a veiled wish for omnipotence" can be regarded as irresponsible emotions. Through reversals of active and passive modes, the depressed person believes himself guilty of creating situations that actually are beyond his conscious control (e.g., psychotic decompensations and losses). Conversely, he does not feel able to do even that which he can (e.g., get out of bed). Meyersburg and associates (2) have discussed this mechanism and its therapeutic implications in detail. By the patient taking responsibility for his illness I mean that he should be helped not to deny his experience, to claim its authorship as with a dream, to experience his psychotic and nonpsychotic selves as continuous, and to integrate the experience. This is not easy, and many patients and therapists will not make the attempt.

Dr. Benson stresses the similarities between his patients' and his own feelings during the patients' manic episodes and how they later can recall together "the horror of the memories retained . . ." (3). Perhaps we are not so far apart after all. In some cases, I have stressed to patients the "partly biological and hereditary nature" of their illness in an attempt to relieve *their* guilt when time or resources were limited or when it seemed to me that further integration was not a possibility for the particular patient. I am not sure these interventions have been helpful, however. I believe that if the patient and therapist are able, it is far preferable to attempt to fully integrate experiences, psychotic or otherwise, rather than to integrate them partially or not at all.

Although some individuals may be genetically predisposed to develop manic-depressive illness, the psychological life of the individual may be of crucial importance in determining whether he becomes ill. It is my clinical impression that psychological events (specifically intrapsychic object losses) do antecede all clinical affective illness, as was suggested in the important works of Rahe and associates (4) on life stress and illness of all types. More subtle, and not easily quantifiable, work with children (5–7) has explained how a complex and unique, psychotic or normal, individual results from the interaction of genetic givens and environmental exigencies. Similar but much more complex processes no doubt occur in adults. In support of using psychotherapy with postmanic patients on lithium, Dr. Benson quoted Abraham (8) as saying that psychotherapy alone can alter the course of manic-depressive illness, but this is what he argues so strongly against in his letter.

The question of whether mania may be precipitated by intrapsychic or interpersonal events has yet to be thoroughly studied. Most biologic psychiatrists have assumed that mania is not precipitated by psychological events. Superficial research has been claimed as evidence for this, but most studies have been primarily descriptive, and only a few brief questions have been asked about precipitating events. When cases of "endogenous" depression were exhaustively studied, it was found that virtually *all* severe depressions were preceded by significant environmental alterations (9). A similar detailed study of environmental precursors of mania has not been reported to my knowledge.

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JOEL KOTIN, M.D.
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Examining the Pavement

SIR: "Crime and Violence Among Mental Patients" by Arthur Zitrin, M.D., and associates (February 1976 issue) is an elegant illustration of the wisdom embodied in the folk observation that the road to hell is paved with good intentions.

While it warrants repeating as often as possible that discharging patients from psychiatric hospitals without adequate community support and treatment programs is a travesty, basing such statements on the kind of data presented in this article is needlessly self-defeating. I should think that anyone with Dr. Zitrin's experience would recognize the glee with which opponents of any diversity and heterogeneity in a community would light on his reported results to buttress their arguments in public forums. This is not to suggest that data should be suppressed simply because they might be used in an undesirable manner. Rather, it is to emphasize that in studies which have as inflammatory a potential as this one, extreme care must be exercised to introduce all possible considerations into the research design and data analysis. The authors appeared to be trying to do this in justifying their use of arrest records, a now generally discredited indicator of criminal activity (even the U.S. Civil Service Commission no longer asks for this information on employment applications), by pointing out that conviction records, a more certain reflection of criminal activity, would be unreliable because of the large number of indicted psychiatric patients who are diverted from the criminal justice system prior to trial. However, the authors do not consider the fact that so many of these patients, by virtue of their obvious strangeness or of being known to the police in connection with their original hospitalization (which very likely involved testimony as to their dangerousness), are likely to be selectively marked for arrest and questioning—especially in connection with violent crimes. This oversight is particularly unfortunate when one realizes that one of the factors initially contributing to the discrediting of arrest records was a recognition of the existence of just such discriminatory arrest practices, albeit applied on racial and class bases.

This consideration opens to question the validity of a key measure used in the study and thus raises doubt about the significance of the reported findings. Had this factor been properly taken into account in the research design, the authors would have recognized that the study, as described, is inconclusive. Not until it had been demonstrated that innocent psychiatric patients are not arrested with greater frequency and on less cause then the rest of the population could any valid conclusions about the violence of "mental patients" be drawn. True, publication of the study would probably be considerably delayed by requiring such a preliminary finding, since it is likely to be particularly difficult to demonstrate because so many of this group are diverted from the criminal justice system prior to trial, which is our only reliable indicator of innocence or guilt. Nevertheless, the research literature and the public would have been none the worse for nonpublication of this article. There are already sufficiently compelling arguments for good community care. One should not have to rely on a study of questionable validity that can also be used to oppose all community programs, and we do not need to provide otherwise well-meaning police officers with a "scientific" basis for arrest practices that ultimately amount to no more than harassment of psychiatric patients.

SIMON L. AUSTER, M.D.
Fairfax, Va.

Dr. Zitrin and Associates Reply

SIR: We admit to the good intentions Dr. Auster ascribes to us, but shouldn't the conclusion about our destination await a careful follow-up?

Dr. Auster argues by asseveration: saying things positively makes them so. What authority is there for his flat assertion that arrest records are "generally discredited" indicators of criminal activity, particularly for psychiatric patients? What is the evidence that patients "are likely to be selectively marked for arrest and questioning—especially in connection with violent crimes"? Reports from state hospital directors, lawyers for New York's Mental Health Information Service, police officers, and our own observations at Bellevue Hospital support the opposite conclusion. There are communities near state hospitals in New York where relatively large numbers of discharged mental patients reside. When those patients commit public nuisances or other misdemeanors that would normally result in arrest, they are often simply returned to the local state hospital. In other areas, minor violations are usually overlooked by the police when the offender is recognized as a mental patient. In Manhattan many patients are brought to the psychiatric division of Bellevue for behavior that would certainly lead to arrest if committed by others. It is possible that former mental patients who commit serious crimes are not as capable of evading arrest as are other criminals, but data on this point are also lacking and difficult to obtain.

We have cited accounts of the abuse and exploitation of mental patients by callous, cruel, and unscrupulous individuals in the community. But where is the evidence that there is substantial harassment of such patients by the police, with or without the support provided them for such action by research findings such as ours?

Dr. Auster's insistence that no valid conclusions about the violence of "mental patients" could be drawn until "it had been demonstrated that innocent psychiatric patients are not arrested with greater frequency and on less cause than the rest of the population" implies that our conclusions are invalid. The only conclusions we drew were that our data on arrest records "are not in agreement with earlier reports based on state hospital patients" but are "in general agreement" with

more recent studies on the same subject.

The answer to the question that Dr. Auster poses can only be supplied by follow-up studies on those arrested. However, he agrees with us that the diversion of many patients from the criminal justice system would leave the issue of their guilt indeterminate, if we accept the criterion of conviction as evidence of guilt. Although we are engaged in such a follow-up study as part of an examination of the diversionary process, we do not agree that publication of our findings should await the conclusion of that investigation.

In this connection, Dr. Auster's second point seems to us more important. Despite his disclaimer, he is clearly implying that the results of scientific inquiry should be withheld if they are potentially "inflammatory" or can be misused for socially undesirable ends. While we feel that the greatest care must be taken to safeguard against the misuse of the fruits of scientific investigation, whether in the fields of genetics, nuclear physics, or mental health, we disagree with a posture that smacks of antiscience vigilantism. History tells us clearly of the consequences of such curtailment of free inquiry, first done for noble goals to be sure, but soon used for debased ends.

Arnoff (1) has pointed out that policy toward mental illness has often been determined by short-range political expediency and the pressures of social reform rather than on the bases of hard fact and clinical experience. He writes, "There comes a time when reformist zeal must be matched against available data, and while the humanistic goals may persist the paths to them must be modified. This clearly is long overdue for mental health." We agree.

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ARTHUR ZITRIN, M.D.
ANNE S. HARDESTY, PH.D.
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ANN K. DROSSMAN
New York, N.Y.

Confidentiality in Military Psychiatry

SIR: I am writing this letter to protest two aspects of the U.S. Army alcohol and drug treatment program—the lack of confidentiality and the failure to separate counseling from probationary functions.

While in the Army (my tour was from July 1969 to December 1975), I once was asked by military intelligence to furnish evidence related to alleged alcohol abuse by a patient I had been seeing in psychotherapy for several months. I referred them to another psychiatrist to conduct the evaluation, but they insisted on obtaining the information from me. They demanded to see the patient's psychiatric records but fortunately I had kept none. I obtained legal advice to the effect that I could be imprisoned if I did not answer their questions. Finally, I was forced to give them a long statement, essentially stating in detail that I did not have enough information to answer any of their questions.

The problem of confidentiality has become worse recently. Since late 1975, every soldier and dependent treated at a drug and alcohol abuse treatment center (or at any mental hygiene or medical facility in the Army) has been asked to sign a statement to the effect that any information he/she gives can be used by the Army to "conduct authorized investigations" or for "other lawful purposes including law enforcement and litigation."

Another limitation to the Army drug and alcohol program is the lack of separation between counseling and probationary functions. After a patient is admitted to the program, he must demonstrate 60 days of good behavior in his unit and 8 weeks of "clean urines," or he may be discharged from the Army because of "rehabilitation failure." In other words, he is placed on what amounts to probation. This probationary function of the program should be separated from its counseling function. A counselor should not have to coerce his patients to attend sessions or discipline patients when they misbehave; a probation worker should not have to see unwilling, unmotivated patients for 40–50 minutes each week. This current combination of functions has had a demoralizing effect on counselors and has been antitherapeutic for patients.

THEODORE J. WILF, M.D.
Philadelphia, Pa.

Psychosurgery for Political Purposes

SIR: Over the past few years, letters to the editor of the *Journal* have dealt with controversies related to psychosurgery, including its possible use for political control. However, to the best of my knowledge, no detailed documentation on this subject has been available in a scholarly journal. Those who have been following the controversy may therefore be interested to know that the *Duquesne Law Review* has recently published my article "Psychosurgery for Political Purposes" in a special symposium on medical experimentation and behavior control (1). The article documents how a small group of influential psychiatrists, neurologists, and neurosurgeons began promoting psychosurgery for political purposes following the urban riots of 1967 and 1968, including its use to treat rioters, protesters, and leaders of urban disorder. The article describes how this group systematically rode the wave of public fear to obtain state and federal funding for their projects. A limited number of reprints are available at the address below.

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Confirming a Side Effect

SIR: In "Thioridazine and Sexual Dysfunction" (January 1976 issue), Joel Kotin, M.D., and associates reported a high (60%) incidence of sexual dysfunction in men taking thioridazine. The experience at our aftercare program at Northwestern University is in complete agreement with their findings. In addition to those persons who have complained rou-

tinely of the sexual dysfunction, two patients presented with extreme panic, perplexed by their ejaculatory incompetence but feeling ashamed to discuss the actual symptom. Direct questioning, reassurance, and medication change solved the problem quickly.

In practice, we no longer prescribe thioridazine to male patients. Curiously, we have had three patients who insisted on thioridazine. One man found that it was an excellent treatment for his premature ejaculation. A second was an extremely regressed schizophrenic who felt the drug enabled him to masturbate more frequently. The third was a guilt-ridden obsessive individual who felt much better about masturbating if he did not ejaculate.

MARK A. AMDUR, M.D.
Chicago, Ill.

An Error Corrected

SIR: I think there is an error on page 210 of "Recent Developments in the Drug Treatment of Schizophrenia" by John M. Davis, M.D. (February 1976 issue). I doubt that the author meant to say "60 mg/day of trifluoperazine is equivalent to about 1 g/day of chlorpromazine. . . ." Later in the same sentence, a different standard of equivalency is implied.

CARL N. BROWNSBERGER, M.D.
Newton Lower Falls, Mass.

Dr. Davis Replies

SIR: Dr. Brownsberger is quite correct. A typing error was made in the original manuscript; the sentence should read "60 mg/day of trifluoperazine is equivalent to about 2 g/day of chlorpromazine." The calculation is as follows: since 2.8 mg of trifluoperazine is equivalent to 100 mg of chlorpromazine, 60 mg/day of trifluoperazine would be equivalent to 2.1 g of chlorpromazine. Since 734 mg/day of chlorpromazine is the normal daily dose, 60 mg of trifluoperazine would be 3 times the equivalent normal daily dose of chlorpromazine. Hence 600 mg would be about 30 times the normal antipsychotic dose.

A similar calculation two paragraphs below this statement indicated that 15 mg of trifluoperazine is equivalent to 535 mg/day of chlorpromazine. Since this article went to press, another study (1) has appeared that also found that megadose treatment using 1200 mg/day of fluphenazine (or 100 g chlorpromazine equivalent) is no better than 30 mg of fluphenazine (or 2.5 g chlorpromazine equivalent). The purpose of these calculations is to convert the dosages of the different drugs used in the various studies to chlorpromazine equivalents. This provides a standard of comparison for the dosages used in these studies.

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JOHN M. DAVIS, M.D.
Chicago, Ill.

Prospective Studies on Released Inpatients

SIR: Our own review of the literature, like that in "A Note on Some Recent Studies on Released Mental Hospital Patients in the Community" by Leona L. Bachrach, Ph.D. (January 1976 issue) has shown that there are few comprehensive prospective studies in this area. This lack has spurred us to complete our own prospective research project on the continuity of care of psychiatric inpatients as they are released into the community (preliminary papers have already been published [1, 2]). The study focuses on a cohort of 200 patients with all diagnoses, not just selected groupings as Dr. Bachrach suggested. We are attempting to focus on a variety of criteria that deal with postrelease functioning, rather than limiting the study to recidivism, as she also suggested. We are looking at patients' social functioning, living arrangements, outcome of aftercare plans, and level of economic capacity.

There are not more studies at this time because such research is extremely difficult. First, there is the problem of the many variables one must consider. Another difficulty is creating a milieu in which this type of data can be adequately collected, the major problem being staff resistance. Funding is extremely skimpy. We are hopeful that the rest of the papers that will come out of our research project will be of interest to the readers of Dr. Bachrach's article, since they, like us, are interested in improving the quality of patient care and the delivery of health care in a very complex system.

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Ann Arbor, Mich.

BOOK REVIEWS

Selected Papers of Ernst Kris, *by Ernst Kris. New Haven, Conn., Yale University Press, 1975, 512 pp., $20.00.*

The felicitous grouping of Ernst Kris's papers into four categories highlights the breadth of his contribution to psychoanalysis. Although the subjects seem disparate, Kris's creative insights weave through all the papers and integrate his work.

In the first group of papers, which deal with the psychology of childhood, Kris emphasizes the importance of validating by direct observation the genetic propositions of psychoanalysis that had been derived from reconstructions. In several papers he presents the observations derived from his participation in the longitudinal studies at the Yale Child Study Center, which demonstrated the effects of conflict, ego maturation, and autonomous ego function on both normal and pathological personality development.

Although Kris's case studies illustrate that narcissistic supplies are an essential spur to emotional and intellectual growth and to the unfolding of special gifts and talents, they also indicate that optimum degrees of frustration and gratification have to be more carefully delineated. The effect of a traumatic situation depends not only on the nature of the trauma but also on the stage of the child's development at which it occurs. Parental attitudes are decisive, but these are not fixed; they vary in response to the child's development and are determined by intrapsychic issues that are often unconscious and not easy to identify. Because unconscious factors also play a role in the child's responses, which are elaborated into fantasies, direct observation has to be supplemented by psychoanalytic observations in order for one to arrive at valid conclusions.

Interest in the unconscious and the processes by which memories and other unconscious material become conscious dominates the second group of papers, in which Kris's unusual gifts as a clinician and synthesizer of psychoanalytic thought are amply demonstrated. For the unconscious to become conscious, the ego must be receptive to the id. In the clinical setting, this receptivity occurs when interpretations remove barriers to recall. This process, which is largely preconscious, depends on the ego's capacity to integrate conflicts and trauma that have been barred from consciousness. In the "good analytic hour," i.e., one in which spurts of understanding occur, there is evidence of this process. Controlled regression occurs and the ego, which has the ability to observe and to contain affect, integrates and synthesizes events of the past as they affect the present.

The aim of analysis is not merely to recover childhood memories but to understand and modify the effect that unfulfilled wishes and longings have on current situations. That patients are struggling not merely with actual past events but with fantasies and psychic realities is illustrated especially in the paper on the personal myth, in which Kris discusses the substitution of fantasy for painful reality.

The subject of the third group of papers is the history of psychoanalysis. In these papers Kris emphasizes the importance of the development of the concept of the ego. He traces the modification of this concept as it was influenced by clinical observations and their impact on all aspects of psychoanalytic theory. The ego cannot be understood in isolation from other psychoanalytic propositions because its development is influenced by drives, by the superego, by object relations, and by autonomous ego attributes.

In the last series of papers, Kris applies psychoanalytic insights to the subjects of prejudice, propaganda, morale, and creativity. He skillfully demonstrates that although each of these phenomena has its roots in basic human needs, they are all multidetermined. Kris's capacity to explicate the effect of the interaction of many levels of psychic organization on human behavior is noteworthy and is especially evident in his paper on creativity.

Reading Kris's papers as they are presented in this volume is a rewarding experience because it enables the reader to follow his creative insights and challenging observations through the many contexts in which he presents them. Although Kris's work has long been held in high regard, the impressiveness of his contribution becomes more apparent when these papers are read in sequence.

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Research in the Service of Mental Health: Report of the Research Task Force of the National Institute of Mental Health. U.S. Department of Health, Education, and Welfare Publication 75-236, *edited by Julius Segal, Ph.D., Donald S. Boomer, Ph.D., and Lorraine Bouthilet, Ph.D. Rockville, Md., NIMH, 1975, 444pp., no price listed (paper).*

This is an extensive and detailed report by a large task force of the National Institute of Mental Health, backed up by committees involving 300 scientists who reviewed the work of NIMH since its inception in 1948.

NIMH has been the nation's major source of support for research in the broad domain of mental health. It has also carried out many investigations in its own laboratories and facilities. All told, thousands of investigators have pursued problems under NIMH auspices "that span the range of mental health concerns and that involve the full spectrum of behavioral disciplines." The number of identifiable research efforts has increased impressively—from 38 in 1948 to 1,497 in 1972. During this period more than a billion dollars of federal money has been invested in the pursuit of new knowledge and techniques in the fields of mental health and behavioral science.

Many experts called to the task asked the following questions: What progress has been made? What research areas are expected to be most profitable in the future? Which administrative and organizational support mechanisms are best to reach stated goals?

The scope of the review is very broad. The work was carried out by 10 study groups in such diverse areas as biological and physiological processes, psychological processes, social and cultural processes, mental illness, behavior disorders, drug abuse, alcoholism, social problems, treatment

techniques, mental health services, and research information and utilization.

The chapter on the organization's history takes us from the work of the National Committee for Mental Hygiene under Clifford Beers in 1909 through the various activities preliminary to the founding of the National Institutes of Health (mainly through the efforts of Walter Treadway and Lawrence Kolb, Sr.) to the establishment of NIMH under Robert Felix, whose outline for the program became the working paper used by the Congress that passed the National Mental Health Act in 1946. Under Felix' leadership the research grant program, grant review process, intramural program, and other major expansions took place. Programs for training, small grants, international research, applied research, demonstrations, and information systems also flourished under his leadership.

When Bertram Brown became the director of NIMH, child mental health was designated as its top priority and more prominence was given to drug abuse and alcoholism. The report does not discuss in detail the reorganization that became effective in July of 1973, which patterned a new relationship among alcoholism, drug abuse, and mental health and is known as the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA).

Chapter 3 of the report presents an overview of support of research activities, showing their great diversity. Funds committed to each field are detailed in several important tables that present an impressive picture of the evolution and differentiation of thought and activity in the burgeoning disciplines.

Chapters 4, 5, and 6 deal with basic research in biology, psychology, and sociology, respectively. These are followed by an extensive discussion of research on behavior disorders and such categorical programs as alcoholism, childhood psychosis, schizophrenia, and drug abuse.

The chapter on research in social problems emphasizes the importance of further advances in design and in improved methods of handling data. The chapter on research in mental disorders covers a whole range of modalities thought to be clinically useful, such as psychoanalysis, family therapy, milieu and community care, encounter groups, token economies, aversive therapies, biofeedback, and modeling. The psychopharmacological treatment of mental disorders as well as other somatic therapies come in for intensive discussion.

The section on research in mental health services reports progress made on case-register technology, admission rates, demography, automated data systems, epidemiology, school programs, rehabilitation, foster care, day care, home care, and the essential components of effective delivery systems.

The final chapters deal with the dissemination and use of research information and the administration and organization of research programs.

Each chapter is carefully written and is followed by an extensive and useful bibliography. The 300 workers who were involved in developing this summation did their work extremely well. The volume is a gold mine of information on what has happened in the United States in the last quarter-century and clearly shows the dominance of NIMH in cultivating, energizing, and directing the research activities of the nation.

It would take a long book review, indeed, to do justice to the broad and detailed analytic and synthetic work reported in this volume. NIMH is to be congratulated on another contribution to the history of research endeavors in this country. One hopes that the future holds equal promise of federal support for the nation's scientists. The book is to be commended to every researcher now in the field and to all prospective researchers. Administrators of all kinds of scholarly and academic facilities will want to be conversant with its contents, and Congressmen and executive officers of government will find much to appreciate in this landmark contribution to American history.

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Mental Disorder in Earlier Britain: Exploratory Studies, *by Basil Clarke. Cardiff, Wales, University of Wales Press, 1975, 327 pp., £10.00.*

For too long a time it has been traditional to speak of the middle ages as the dark ages, thereby implying that it was a time of stultifying inactivity. We have gradually discovered that using this term is a commentary on our contemporary knowledge more than anything else. Recent scholarship has opened up this previously obscure period of history and has revealed it to be full of riches. In its own fashion, this book by Basil Clarke is a contribution in that direction.

Clarke's studies of mental illness in early Britain cover a range from the early Celtic societies through the end of the seventeenth century. Clarke recognizes that he is undertaking a very ambitious project and therefore subtitles his book *Exploratory Studies*. He is not trying to digest and give us the full benefit of his extensive knowledge, which is really a challenge for a subsequent work. Rather, he presents us with an extensive survey that makes use of not only the medical literature but a wide range of evidence from other sources.

The first half of the book takes one through the fourteenth century. Starting with the Celtic literature, Clarke explores the beliefs of the medical Druids, folklore, religious literature, various early laws, the tradition of the wild man, and a wide variety of other topics.

That nonmedical literature can make valuable contributions to the understanding of the psychiatry of that early period can be seen not only in Clarke's book but also in some other recent writings that he does not cite. I think particularly of the excellent survey of Penelope Doob of the concepts of madness seen in middle-English literature (1). Judith Neaman has written a study of medieval literature in which she presents a picture of madness by synthesizing what can be learned from the literature, art, history, and science of the day (2). The role of the devil in matters of madness appears in both of these works and more extensively in a less recent book by Jeffrey Burton Russell (3). With these three books plus Clarke's in hand, any serious student can extend his or her knowledge of the medieval concepts of madness.

The middle section of this book provides source materials that are extremely valuable. The first reports on a group of patients who had been treated at St. Bartholomew Hospital in London in the twelfth century and the second on a series of patients who appeared at the tomb of Henry VI at Windsor in the late fifteenth century to seek alleviation of their problems. The final account is devoted to the sudden illness of King Henry VI of England at the age of 31 in 1453. His illness resembled a catatonic stupor from which he gradually recovered only to suffer from intermittent periods of difficulty thereafter. Clarke explores the hereditary possibilities in Henry VI's family and finds one clear-cut predecessor in his maternal grandfather, King Charles VI of France.

In concluding his book, Clarke reviews the sixteenth and seventeenth centuries; in regard to the former he pays considerable attention to popular medicine and magic, and in regard to the latter he includes a review of the extensive case studies by Dr. John Hall, the son-in-law of William Shakespeare.

This is indeed a very comprehensive book. The reader will find an enormous amount of information about psychopathology, the social reaction to psychopathology, theory, diagnosis, treatment, hospitals, and forensic factors. Its major defect, however, is a difficulty in finding the material. This arises from three factors: 1) the coverage is encyclopedic, 2) the subject index is highly inadequate, and 3) the book is so full of details and written in such turgid prose that the reader encounters a problem in rapidly locating the subject that interests him. However, the subjects are there and the reader will be rewarded for his efforts in searching for the information. No one interested in the history of psychiatry or the history of this period in Britain will be able to do without this important volume.

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The Effect of the Method of Payment on Mental Health Care Practice. Report 95, *by the Group for the Advancement of Psychiatry Committee on Governmental Agencies. New York, N.Y., GAP, 1975, 130 pp., $4.00 (paper).*

This little volume, with its unassuming title, is a most valuable contribution to an emerging body of literature concerned with future patterns of mental health care in general and the influence of impending national health insurance in particular. The report compares six mental health care systems (private practice, a health maintenance organization, a community mental health center, a state mental health system, the Veterans Administration system, and the military system) in terms of major common variables. The contrasts are sharp.

It is disconcerting, to say the least, to acknowledge the range of unresolved issues that still characterize the delivery of mental health services in the United States. They provide a rough measure of the organizational and scientific issues that remain controversial in our field. As long as we cannot agree how to diagnose psychiatric patients or whether a medical model or some social model should be used to understand mental illness, it follows that there must be corresponding differences in criteria for selecting patients for treatment, in models of therapy, in quality control, in professional credentials, and in a range of related issues.

The failure thus far of scientific methods to answer many of the crucial questions in psychiatry is common knowledge. What has been less clear is the role of economic factors in forcing practical answers to so many of these questions. Despite all of our knowledge and sophistication, it may still shock many to learn that a patient suffering almost any form of mental illness is most unlikely to receive the same treatment for his condition in different mental health care settings. The sample health maintenance organization reported in the book would most likely prescribe short-term psychotherapy, with return to function as the primary treatment objective. The same patient would probably be assigned to group therapy in the community mental health center or to long-term individual psychotherapy by a psychiatrist in private practice. Here is evidence not just of a dual health care system—one for the rich and one for the poor—but of a multitiered delivery system whose configuration differs in almost every imaginable dimension as a function of variables that are essentially economic.

The book wisely and successfully avoids polemics and proselytizing. Each of the six systems is presented fairly and openly, without hiding inherent weaknesses or flaunting inherent strengths. All five of the organized mental health care settings—different as they are—are more like one another than any one of them is like private practice. Although private practice continues to offer the widest range of treatment services and the most flexible and refined options for the development and application of an individualized treatment plan, it is also the system most rigidly locked into a medical model of illness that excludes many social considerations. Private practice also remains the most exclusive form of treatment because so many cannot afford it and have no insurance to cover the costs.

The ideal for the future would embody the best of what now exists, and this report ends with a call for funding mechanisms that would guarantee equity of care for all, professional autonomy, and personalization of treatment and that would also allow, if not encourage, an open diversity of mental health care mechanisms.

The final chapters of the book, which compare the six systems and provide succinct concluding recommendations, will prove sufficient to the topic for many readers. However, the detailed chapters on the different forms of service organizations are surprisingly interesting. Although probably not destined to become a best-seller, *The Effect of the Method of Payment on Mental Health Care Practice* is surely required reading for anyone involved in health care planning. The book will raise the level of sophistication regarding problems of mental health care for any reader who takes the time to seek different points of view on this issue of timely interest to our profession.

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Cases of the Reincarnation Type, Vol. I: Ten Cases in India, *by Ian Stevenson, M.D. Charlottesville, Va., University Press of Virginia, 1975, 367 pp., $20.00.*

During my visit some years ago to a country behind the iron curtain, a colleague attempting to impress me with how far the post-Stalin thaw had progressed asserted that anyone in his position could now maintain any viewpoint he pleased on any question at all. "Even on Trotsky?" I asked. "Certainly not," he snapped, as if my question could not have been more preposterous. Equally preposterous among otherwise open-minded Western scientists, I suspect, would be the question of reincarnation, and this might even be said to be the case among most people in the field of parapsychology.

To begin with, the idea of reincarnation (defined in Hinduism as the union of a soul with a new physical body after the death of the physical body with which it was previously associated) appears to be irreconcilable with established fact in biology and evolution, to say nothing of the rest of science. Next, the hypothesis obviously does not lend itself to any kind of experimental test. Finally, the idea of karma (the effects of behavior in one life on one's fortunes in another life), with which it is frequently associated, is as completely useless a blank check as has ever achieved the status of a seriously entertainable notion.

Despite all this, the factual basis for the widespread belief in reincarnation turns out to be as legitimate a subject for investigation as anything else in the natural world. Circumspectly sidestepping the issue of karma, Dr. Stevenson, Professor of Psychiatry at the University of Virginia and author of an earlier volume on reincarnation (1), deals in this first of several intended volumes solely with his checking and rechecking of anecdotal and documentary data relating to 10 selected cases of the reincarnation type in India. The work took 16 years of dogged research. In all 10 cases studied, several of the persons involved (most of whom were believers in Hinduism, in which the doctrine of reincarnation is central), believed that reincarnation had occurred. Dr. Stevenson presents his material in a lucid, detailed, judicious, and always interesting manner.

Reincarnation type cases might run somewhat along the following lines:

A child, shortly after he starts to speak, begins talking of things, places, and people that appear to be utterly strange to the parents. The child may even behave in a way that cannot easily if at all be accounted for in terms of the circumstances of his upbringing. The child may relate all this to a previous life he claims to remember having led.

If the child persists in such talk and behavior, which, although often quite trying to the family, appears to be easily differentiable from known types of mental disturbance, the parents or friends of the family sooner or later start to make inquiries concerning persons presumed to be deceased to whom the child's statements might apply. They might even use the personal columns in newspapers for these inquiries. Sometimes, however, the child's statements about his name in the "former life" or the town he lived in are so highly specific that it does not take much searching to find the family that appears to be the source of the statements. Once contact is established, additional information verifying or contradicting the child's statements is usually found, and the child may be taken to the family he claims to have been his original family.

Here begins the process of "recognition," whereby the child takes his parents and others through complicated streets and alleys and, with almost somnambulistic precision, directly to the place at which he claims to have resided or worked in the former life. He then greets various persons he may meet there by name and with appropriate behavior, which is sometimes quite negative. Gradually the chinks in the picture are filled in—likes and dislikes, special idiomatic phrases, nicknames, and names for objects. Occasionally information having to do with criminal or morally scandalous activities that are highly embarrassing to the second family are uncovered.

Obviously this kind of procedure is beset with pitfalls. Reliable primary data have to be winnowed out from rumor, deliberate or inadvertent falsification, the possibility of hoax, and the snowballing potential of overeager witnesses. All possible means whereby information about the second family could have been conveyed to anyone remotely connected with the child's family and thus to the child have to be investigated and evaluated. It is in the care with which this has been done in these 10 cases that Dr. Stevenson makes his major contribution.

According to Dr. Stevenson, after chance and normal means of communication between the two families involved have been rendered more or less implausible as explanations, one is left with two alternatives: reincarnation or a two- or three-year-old child's acquiring information paranormally and then weaving it into a scenario that has all the earmarks of reincarnation. Stevenson leans toward the former hypothesis, but it almost goes without saying that neither hypothesis will be acceptable to most minds bred in a materialistically oriented scientific tradition. Many persons within the field of parapsychology, on the other hand, may not agree with the simple set of alternatives that Stevenson adduces and might well consider the problem far more complex.

Regardless of his bias, the psychiatrist will hardly fail to note that most of the cases presented in this volume occurred in a context of intrigue and violence, at least within the families of the persons allegedly reincarnated. In 7 cases there was murder or suspicion of murder; 6 of these involved the persons murdered. In addition, 1 child had been separated in infancy from his real parents, and in 6 cases there was marked upward movement in economic status, caste, or both. Indications of such upward movement were often the first signs of anything unusual—a child refused to eat or behave as he was supposed to in a lower station and persistently professed to have been of a higher one. In no case was there a lowering of caste or economic status.

Surely factors of this sort in no way invalidate the primary data themselves, but they do invite speculation along dynamic lines. Is "reincarnation," whatever its existential status, symptomatic? Is there, in suitable soils, a "reincarnation syndrome"? If so, how does this manage to translate itself into a kind of reality, a question clearly not too unlike one that pervades psychiatry (and parapsychology). Whatever way such issues are resolved (if they ever are), Dr. Stevenson has done a signal and signally courageous service in bringing them so insistently to the fore.

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Depression and Human Existence, *edited by E. James Anthony, M.D., and Therese Benedek, M.D. Boston, Mass., Little, Brown and Co., 1975, 546 pp., no price listed.*

During the last few years there has been a striking increase in the level of professional interest in the problem of depression. It has been suggested that the incidence of clinical depression is on the rise, although there are no sound epidemiological studies to verify this impression. One can infer, however, that a society in which the experience of loss has become commonplace—as divorce increases and a sense of community is weakened—will be fertile ground for depression. It is also possible that biological changes resulting from the very food we eat and air we breathe may have an effect

on the mind, even as it has been recently demonstrated that certain children manifest psychotic behavior as a result of ingesting artificial food flavoring. Helplessness, loneliness; and discontinuity are common elements in depression and rather characteristic features of the current culture.

Drs. Anthony and Benedek have attempted to put together a comprehensive review of the subject of depression, with particular emphasis on the experience of being depressed as part of a universal human vulnerability. The contributors to this volume are notable and outstanding. George Winokur, for instance, discusses the issue of heredity in affective disorders, Arnold J. Mandell reviews neurochemical aspects, and Edith Jacobson discusses the relationship between self-esteem and depression from a psychoanalytic point of view.

Unfortunately, as a textbook the editors' efforts do not quite succeed. To begin with, the ordering of material does not follow a sufficiently logical course. Immediately after an introduction that attempts to review the question of depression from a psychoanalytic as well as an existential viewpoint, there are 3 chapters on biological aspects, then 2 on cultural and social influences. Most of the remaining 16 chapters are heavily and traditionally psychoanalytical in emphasis. More to the point, there are certain specific gaps in information. For instance, the chapter on biochemical and neuropharmacological research in the affective disorders explores at length (and somewhat uncritically) the biogenic amine hypothesis, but it fails to give adequate coverage to endocrine and mineral changes that may be of equal importance in such disorders. The chapter by Edith Jacobson on the psychoanalytic treatment of the depressed patient contains many useful clues and directions for therapy, but it focuses exclusively on a one-to-one treatment setting; nowhere in the book are group approaches (primarily of value for depressed patients who also have characterological difficulties) or family therapy (of central importance for the depressed person whose relationships within the family are in disequilibrium) discussed. Nor is there a useful discussion of the integration of biological treatment with psychological therapy and environmental modification.

To be sure, creating a multiauthored text is a major labor. When the editor has a particular concept in mind, it is especially difficult to select and shape the material that various contributors may submit to establish this hypothesis. In their introduction, Drs. Anthony and Benedek approach the concept that depression itself may be an existential human experience and intimately related to the survival of the human organism under certain kinds of stress. In the final chapter, Michael Basch attempts to develop the thesis that depression is a "general system dysfunction rather than a unitary disease entity." However, this effort at synthesis is never really successful. On the whole it is obscured throughout the book by repetitiousness (Freud's *Mourning and Melancholia*, for instance, is discussed again and again) and by a common problem that plagues psychiatry and the behavioral sciences in general: the unclear use of language. Because language is essentially a way to communicate concepts, one must question how precisely these concepts have been thought through.

The strongest and most interesting chapters in the book are those written by the editors themselves. For instance, Dr. Anthony's chapter on the influence of a manic-depressive environment on the developing child is intriguing, provocative, and original. In two other chapters, the focus he directs toward the nature of depression in childhood and adolescence, where it is often overlooked, is well presented. Rather than assembling the material as they have done, it might have been far more valuable for the editors to have concentrated on writing their own book because their knowledge of the subject is well developed, their personal experience with it is unique, and their own theoretical vision of what depression may be all about is a potentially valuable beacon to researcher and clinician alike.

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Child Personality and Psychopathology: Current Topics, Vol. 2, *edited by Anthony Davids, Ph.D. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1975, 252 pp., $16.95.*

In reviewing the first volume in this series (April 1975 issue of the *Journal*), I felt that it met the needs of the child psychiatrist and child therapist in the field and in the university setting. This second volume establishes this series as a must for all who are interested in child development and psychopathology. Each paper is timely and original and presents research in a stimulating fashion. Anthony Davids is to be congratulated for his selection of papers, as well as for the fact that one has a feeling that the papers flow together.

The volume is divided into three sections. The first focuses on cognitive and personality development. Two outstanding papers are included here. Even though Mary Engel, Herbert Nechin, and Arthur Arkin caution the reader against assuming causality from the results they report in "Aspects of Mothering, Correlates of the Cognitive Development of Black Male Infants in the Second Year of Life," it is difficult not to do so when one is presented with such excellent material. Robert Liebert and Rita Poulos' paper, "Television and Personality Development: The Socializing Effects of an Entertainment Medium," is the best paper I have read on this difficult subject. Their statement that "television captures the attention of nursery and elementary school age children for an average of three hours per day, seven days a week, so that by age 16, most children in the United States will have spent more time watching television than going to school" makes this paper a must. The authors present a very systematic study of this socialization process in detail.

The second part of the book deals with psychophysiological and behavioral disorders. Here again are two timely and excellent papers. Kenneth Purcell's paper, "Childhood Asthma: The Role of Family Relationships, Personality, and Emotions," broadens our understanding of the developmental dynamics of families. This paper deals with asthma subgroups, allergic potential classification, and experimental separation of asthmatic children from their families. C. Keith Conners' paper, "Minimal Brain Dysfunction and Psychopathology in Children," comes at a time when all practitioners are being flooded with data and presents an excellent review of papers dealing with this subject. A great deal of work has gone into the biological and psychosocial aspects of minimal brain dysfunction and the effects of altering the central nervous systems of hyperkinetic children.

The third part of the book deals with childhood psychosis. Two papers deserve special mention. Norman Garmezy's excellent work in schizophrenia is well known; his paper, "The Experimental Study of Children Vulnerable to Psychopathology," opens a new and intriguing perspective on children at risk. He presents an in-depth look at the world literature dealing with children at risk for schizophrenia. His conclusion from this survey is that we are at risk if we jump to conclusions that seem so logical that they smack of commonsense. Sarnoff Mednik, Harme Schulsinger, and Fini Schul-

singer's paper, "Schizophrenia in Children of Schizophrenic Mothers," represents the beginning of really being able to define the concept of "at risk" and the beginning of a plan to deal with these problems.

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The Creation of Deviance: Interpersonal and Organizational Determinants, *by Richard Hawkins and Gary Tiedeman. Columbus, Ohio, Charles E. Merrill Publishing Co. (Bell & Howell Co.), 1975, 363 pp., $11.95.*

This book provides a sociological perspective on various social and psychological processes thought to be involved in the creation and societal control of deviance. It offers both a review and an assessment of a large body of sociological (and, to a lesser extent, social psychological) writing that attempts to understand how and why some people become labeled deviant and what happens to them once they are. Much of the emphasis is on mental illness and on the social agencies that cope with persons labeled mentally ill. Although the authors acknowledge a special debt to Thomas Szasz and *The Manufacture of Madness* (1), this book is much more than a simple extension of Szasz's views. It is an unusually comprehensive, clear, and well-balanced introduction to a sociological perspective on deviance that challenges conventional psychiatric theory and practice. It should be read by any psychiatrist who wishes to learn what sociological research has to say about the social "creation" of "mental illness."

The first four chapters constitute a lucid introduction to basic concepts and theories in the sociological study of deviance. Thus Hawkins and Tiedeman begin with a sophisticated discussion of rules, roles, and labeling theory, not only within the more traditional symbolic interactionist approach of Becker, Goffman, and Scheff but in the radical emergent subfield of ethnomethodology as well. Their treatment of this sometimes arcane approach is clear and useful, touching on the central ethnomethodological issues of how human beings construct and maintain the sense and appearance of social order (as in the work of Garfinkel) and on practical applications of such an approach (as in the work of Cicourel and Douglas). Much of this conceptual and theoretical background relates directly to mental illness, as can be seen in the authors' central assertion that the sources of mental illness and, more generally, of deviance reside in social processes that create labels rather than in bodies that become ill. The assertion is hardly new, but a book that assembles the concepts and the existing data in one place is both new and valuable.

The remainder of the book deals with what the authors call "social-control" agencies that process, house, and otherwise deal with persons who have been labeled deviant. Much of this material—from Goffman's total institution to Rosenhan's studies of psychiatric inpatient facilities—will be familiar, but some of it, especially that dealing with criminality and justice, will be less so. In all, this section is less creative than the earlier one, but it is relevant to the psychiatric enterprise, and it will repay careful reading. A final chapter considers the broader role and function of deviance in society. Even though the authors' treatment of the many complex issues involved in this topic is brief, they manage to convey some of the importance that such a societal perspective can yield.

Few books are at once clear, judicious, and sophisticated. This one is. It can be read with profit by students and professionals alike. The labeling theory that the authors review and extend is at times conceptually muddled, and it sorely wants for careful empirical test. In time, much of it will no doubt prove to be illusory. Nevertheless, the perspective must be taken seriously. Hawkins and Tiedeman should be congratulated for producing a book that will help the reader to do exactly that.

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ROBERT B. EDGERTON, PH.D.
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The Inner World of Daydreaming, *by Jerome L. Singer. New York, N.Y., Harper & Row, 1975, 261 pp., $10.00.*

Although this book was designed, according to the author's own statement, for a general audience, it can have a number of uses for psychiatrists. Pleasantly written, it might make a bibliotherapeutic tool for those who use this adjunct mode. The volume can certainly be easily read in an evening or scanned in chunks at a number of starting points. For those reviewing the use of directed fantasy in psychotherapy or considering this strategy for the first time, the book provides a good entry point and guide. The second half, in particular, reports on a number of studies in the area painlessly enough to hold a casual reader's attention and artfully enough to evoke curiosity in the more sophisticated.

The ability to write fluently for a lay audience on a subject like fantasy is a challenge often vouchsafed only to professionals who possess a vast and profound knowledge and the capacity to distill it. Informed readers may be irritated by Singer's reminiscences of his own "daydreams" or his analysis of Scarlet O'Hara's daydreams or object to the rehashing of Erikson's version of Ben Roger's steamboat fantasy from *Tom Sawyer* or the discourse on why people close their eyes when kissing. In fact, the material is perhaps more chatty than necessary, but the book's organization is coherent. The sophisticated reader can therefore easily turn to other sections when bored. However, there are disquieting nuances of a Masters and Johnson how-to-do-it approach to daydreaming that are not easily dismissed.

For the more serious, a better grasp of Singer's scope will come from an examination of his technical work (1). His article for the *American Scientist* (2) is likely to be more satisfactory than his more specifically targeted articles, e.g., those on daydreaming and laterality of eye movements, women's fantasies during sexual intercourse, and television viewing habits of pre-school children. Two articles currently in press promise more usefulness for the specific concerns of psychiatrists. One deals with daydream patterns and self-awareness in psychiatric patients (*Journal of Nervous and Mental Disease*) and the other with a factor analytic study of daydreaming and symptom patterns of psychiatric patients (*Journal of Abnormal Psychology*).

As a guide to encourage self-observation in patients, as a relaxed vehicle for review, or (especially in the latter chapters) as a palatable compilation of some recent research findings by a bona fide authority in the field, the book is worthy of attention.

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1. Singer JL: Imagery and Daydream Methods in Psychotherapy and Behavior Modification. New York, Academic Press, 1974
2. Singer JL: Daydreaming and the stream of thought. Am Sci 62:417–425, 1974

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Developments in Human Services, Vol. II, *edited by Herbert C. Schulberg, Ph.D., and Frank Baker, Ph.D. New York, N.Y., Behavioral Publications, 1975, 374 pp., $17.95; $13.95 (paper).*

This second volume of an ambitious project conceived by the editors as a series on developments in human services consists of an introduction titled "Social Values, Economic Influences and Integrated Human Services," written by the editors; part 1, "Developing Program Models for the Human Services," by Mark A. Lawrence, M.D.; part 2, "The Economics of Human Services," by Gerald Rosenthal, Ph.D.; and part 3, "Developing Human Services in New Communities," by Donald C. Klein, Ph.D.

I would suggest that one read the preface before perusing this volume, even before reading the introduction, to appreciate the comprehensive goals of the editors, to understand the format of the volumes and their parts, and to anticipate the editors' plans for publishing in-depth discussions and reviews on human service topics in the future. The preface is included in each of the three parts because each is available as a separate publication.

The introduction offers an overview of the problems confronting human services planners and also discusses the trends in economic factors, manpower utilization, and program patterns.

Dr. Lawrence presents an extensive discussion of developing program models for the human services, including health and mental health subsystems. He carries on the discussion to include an idealized systems model and attempts to predict future developments in the delivery of human services.

Dr. Rosenthal discusses the economics of human services, emphasizing the need to reach optimal benefits that are derived from the use of our limited resources. Research is discussed throughout the book as an integral function of services. However, I doubt that the essential importance of research in order to understand and evaluate the trends, the emerging innovative programs, and the effectiveness of delivery of services is given adequate emphasis. I cannot agree with the following position expressed by Dr. Rosenthal:

> However, when resources are scarce, reducing the limitations of technology is also a resource-using activity. It needs to be weighed against the other uses to which resources could be put. Decisions to invest in research as opposed to service provision in human services embody this type of tradeoff between alternatives. Each time we devote medical manpower to research we reduce the supply of physicians for providing medical care services. Whether or not this is a good thing to do depends on our expectations with regard to the future benefit from the research as compared to the present opportunity cost in lessened availability of services. (p. 179)

I can only emphasize my belief that research and evaluation are essentials in every human services delivery system. Without adequate research and evaluation, valuable improvements and successful programs could eventually turn to disillusionment and failure or, even worse, inhibit future experimental approaches to human services, including health and mental health delivery systems.

Dr. Klein discusses the development of human services in a new community. This portion of the volume is particularly valuable to those confronted with the planning of human services in newly developed communities or those with a beginning recognition of the need for human services.

This is an important volume containing a valuable contribution to our understanding of the complexities of forces affecting human services, the changing nature of health and mental health services, and the critical need for planning for the future. It is equally helpful to those newly entering and those already active in the field of human services. There is an excellent index and extensive references.

We can look forward to the future volumes planned by the editors.

S.T. GINSBERG, M.D.
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The Disabled and Their Parents: A Counseling Challenge, *by Leo Buscaglia, Ph.D. Thorofare, N.J., Charles B. Slack, 1975, 392 pp., $8.95.*

Dr. Buscaglia performs in this book the much needed task of chiding members of the helping professions for their insensitivity and pomposity in counseling the disabled and their parents. Most professionals who deal with the disabled have not given sufficient consideration to the possibly harmful effects of stereotyped classifications and austere advice on perplexed, confused, and lonely parents. Not only does the book chide us for our callousness, it also clearly delineates how counseling the disabled and their parents can be made more effective.

Dr. Buscaglia speaks feelingly of the cruelty of clinical detachment. He pays less attention to the cruelty of artificially appropriate attitudes in therapists and parents. He points out that the cruelty of unwarranted expectations often has greater impact on the demander than the demandee and that the parent may be hurt more than the child. It is not enough, however, to learn to refrain from demanding. The unloving parent does not become more loving by practicing the right approaches. To become more loving the parents may have to seek extensive therapy for themselves or subject themselves to other influences for change.

Although the book cautions the divine therapist to be more human, it also expects the human disabled person to be more divine. The models held up in the book for the disabled person to follow are Horatio Alger-like figures who have unfailingly conquered adversity. Although he talks of negative affects present in the disabled, Dr. Buscaglia speaks mainly of such negative feelings as hurt and sadness rather than scorn or tyranny. The sentimentality of assuming that the disabled are less capable of bitterness, bitchiness, and contempt than the average individual is not really helpful.

The disabled can less afford to smugly warm themselves over the rightness of their feelings than the able bodied. They are as much entitled to the dubious privilege of being depressed as is the rest of the population. Positive thinking may not be the essential ingredient of any prescription for

the disabled. Is a negative, cynical view of the world permissible only for the nondisabled? If the disabled are encouraged constantly to pass all of the courses that society provides, they may miss other opportunities for development that might in some respects be more fulfilling for them, e.g., there are no societal courses on how to become a Toulouse-Lautrec. A necessary ingredient for the full development of the individual is not only love but some decent distance. We have not learned to balance love and distance sufficiently well to encourage the creativity and productivity of the Toulouse-Lautrecs and, at the same time, develop the capacity for fulfilling social relationships.

Dr. Buscaglia presents a contradiction in encouraging us to be both euphemistic and honest. He does not indicate how one determines when to be one and when to be the other. It is necessary to know when euphemism is tactful and when it is timid and when honesty is arrogant and when it is humble. It is not, as Dr. Buscaglia states, a general rule that the disabled neither crave nor need oversolicitude, pity, or special social considerations. Some if not most of them crave all of these forms of attention and at times may need preference. The problem is not that they crave too much but that they be accepted as readily as other human beings who ask too much for themselves.

Dr. Buscaglia does well to remind us of the very human needs of the disabled in a world that has become increasingly fund oriented and parochial rather than service oriented and global. It is not likely that the disabled will receive the attention they deserve until we recognize that to provide them with the same opportunities as the able bodied is justifiably much more expensive.

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Review of Child Development Research, Vol. 4, *edited by Frances Degan Horowitz, E. Mavis Hetherington, Sandra Scarr-Salapatek, and Gerald M. Siegel. Chicago, Ill., University of Chicago Press, 1975, 654 pp., $17.50.*

The purpose of this book, according to the editors, is "to bring together a set of chapters that would offer a review and integration of what is and what is not known about current topics and issues." This volume is composed of 11 chapters. The first 2 deal with genetics in some detail. One concerns itself with the development of intelligence and points out that we still know very little about the sources of intellectual variance within disadvantaged populations. It also emphasizes the importance of genetic sources of variation. The second deals with genetic abnormalities in development and describes a number of conditions in which genetics have a primary etiological role.

In the next chapter, "The Development of Behavioral Competence in Infancy," the author states that although this field is expanding rapidly, there is much work to be done. The chapter on "Reproductive Risk and the Continuum of Caretaking Casualty" addresses itself to problems of prenatal, perinatal, and postnatal problems and their influence on the development of the child. The next chapter deals with abused children.

The following chapter is essentially a review in which the author points out, among other things, that videotape has replaced the audio tape recorder and gives much more substantive information about the process of language development. The author of the next chapter, "The Development of Referential Communication Skills," states that "the prospects for the future depend very heavily on our success in integrating our conceptions of communication process within our conceptions of language."

The next chapter, "Drug Treatment of Children with Behavior Problems," points out the lack of critical analysis in the literature on this topic. It also warns against the excessive use of drugs in the treatment of children with learning disabilities and minimal brain damage.

Behavior modification is the topic of the next chapter. This author gives over a considerable amount of space to some of the inadequacies of the research methodology in behavior modification as an educational technique. The chapter on "Parent-Child Relations" deals with the development of aggressive behavior and how it is related to parental punitiveness and nonacceptance as well as to parental permissiveness and laxity.

Chapter 10, "Intellectual Development During Adolescence," points out the need for better focused and formulated research. The last chapter, "Cognitive Development in Cross-Cultural Perspective," indicates some of the weaknesses of research to date. Some of the newer research looks promising, but further work needs to be done.

This book contains as many things we do not know as those we do. Each author covers his topic thoroughly, almost redundantly at times. There is real "meat" in every chapter, but one wonders if some of it could have been condensed. For the reader who wishes to delve deeply into the various aspects of child development and research, this is a voluminous and commendable book. It has the added attraction of a concise review of the chapters at the end of each section. It is interesting to note after each painstaking review of the literature how much we have yet to learn in each of the areas covered.

This book is to be recommended to the serious reader in medicine, psychology, social work, and education and to other child-oriented students. It could also serve well as a reference book.

STUART M. FINCH, M.D.
Tucson, Ariz.

Opening the Door: A Study of New Policies for the Mentally Handicapped, *by Kathleen Jones, with John Brown, W.J. Cunningham, Julian Roberts, and Peter Williams. Boston, Mass., Routledge & Kegan Paul, 1975, 251 pp., $20.75.*

This study by Kathleen Jones and her coworkers is based on a careful in-depth evaluation of the residential and community facilities available in one of England's provincial districts, an area belonging to 1 of 14 regional hospital boards. Based on their evaluation, the authors make a number of recommendations. They describe the improvements made in the last decade but also stress the weaknesses observed in the institutions and criticize the lack of programs in the communities. It is easy to say, "Open the doors," but where do these doors lead?

In the preface Jones, Professor of Social Administration at the University of York, states, "Why yet another survey? In the first stage of the work we were repeatedly asked this question by the staff at all levels. . . . It was not surprising that they felt they had had enough good advice; they simply wanted to be left to get on with the job." But there was a difference in the new approach of this team of sociologists. Instead of working as "sociologists, reformers and adminis-

trators" had previously done—"de haut en bas"—they proceeded in the "more empirical and inductive approach" rather than "from abstract principles and working downwards." Although the authors concede that this approach has "its limitations and is more modest in scope and intention," they add that "it may be more securely based, for it offers real possibilities of change with staff cooperation." I wholeheartedly agree.

In discussing the policy background, which is applicable to the American scene only in part even though many problems are shared, Jones indicates that "as the battle for reform moves from central to local government, it becomes more diversified, more fragmented, more difficult to command" and that it "may easily degenerate in dozens of local squabbles."

The authors describe the shortcomings in clear prose that is well documented in its details and illustrated by examples of the experiences of individual team members. When suggesting solutions and outlining staff needs in all professions (including general medical and psychiatric fields) and the development of community facilities, they try to avoid the gap between "idea (models, blueprints) and reality." It is a pleasure to read a well-balanced study after having worked through innumerable sermons about what models one should follow, sermons that usually overlook the main problem, i.e., the needs of the patient.

This book may not interest the general psychiatrist. However, the psychiatrist who has an interest in the field of mental retardation, particularly one who is even tangentially involved in planning for the mentally retarded, can profit a great deal from the approach outlined by this group of sociologists. Even if one may not agree with each conclusion or recommendation, one can learn a great deal from this book. It is highly recommended to our community, state, and federal "planners" in this area of human suffering.

BENEDICT NAGLER, M.D.
Lynchburg, Va.

Group Psychotherapies for Children: A Textbook, *by S.R. Slavson and Mortimer Schiffer. New York, N.Y., International Universities Press, 1975, 467 pp., $17.50.*

The activity of play is a universal form of expressive behavior. It is common to all and to every stage of life. It stimulates movement and perception while encouraging relatedness in an acceptable and manageable form. It recruits imagination and fantasy in behalf of reality and often helps make reality tolerable and pleasurable. Play provides the opportunity to reproduce experiences with the potential for success, making it a positive learning experience. It permits identification with many varied activities while promoting experimentation with all aspects of living. It thus becomes a window to the world for the child. No wonder it has become a major instrument in our approach to helping children cope with their problems.

S.R. Slavson is a pioneer in the application of some of the principles of play to the treatment of groups of children. He has reported his experiments with a variety of techniques in a series of writings over the past 40 years. *Group Psychotherapies for Children*, coauthored by Slavson and Mortimer Schiffer, presents a fine summation of Slavson's contribution to the field of psychotherapy of children. Much of its content will be familiar to those who have followed his work. The format of the text is highly organized and well structured so that professionals wishing to acquaint themselves with Slavson's theories and practices will have little difficulty. Much of Slavson's approach to the subject is presented in a concrete, didactic manner that blends theory and practice.

The book is organized in four parts: Activity Group Therapy, Activity-Interview Group Psychotherapy, Play Group Therapy, and Therapeutic Play Groups in Elementary Schools. These divisions seem to be well defined at first glance; however, close examination of the procedures and categories within each technique shows that much is left to be desired.

Activity group therapy (AGT) is presented as specific for primary behavior disorders, a classification of childhood disturbance that is no longer in use. The other techniques are presented as specific for other equally poorly defined categories of patients. This raises a serious question of their applicability because these techniques are predicated on their specificity to patient groups. As one examines the indications and counterindications for ATG and the other techniques, the issues of selectivity of types of patients become even more obscure because of the overlapping of so many of the treatable and untreatable categories listed by the authors. One can account for success and failure without difficulty by simply challenging the diagnostic classifications of the treated patients. It is this very issue which has made the assessment of therapeutic effectiveness such a problem in all forms of therapy. However, Slavson and Schiffer state, "The effectiveness of AGT is in direct relation to the care taken in selecting and grouping children correctly" (p. 111).

Another problem plaguing so much of the work in the field of child psychiatry is present in this book—the use of special language. Such terms as "instigators," "neutralizers," and "neuters" are coined for this text. Behavior within the group is identified with "true focus of infection" and "pseudo focus of infection." Relationships within the group are presented as "symbiotic" or "anaclitic." This specialized use of terms, even when definitions are offered, makes it difficult to transpose both theory and practice into any other frame of reference. This style contributes to a subtle egocentricity, permitting such questionable statements as "A considerable body of clinical material has been accumulated over a period of almost four decades to establish that group therapy is the major treatment modality for children" (p. 133). However, in spite of this, the authors describe many good and sound principles for planning, intake, management, record keeping, and termination practices. These descriptions make the book a valuable addition to the body of literature on the psychotherapy of children.

The second part of the book, on activity-interview group psychotherapy (A-IGP), presents the well-defined but arbitrary criteria distinguishing this form of therapy from AGT. Children with "uncontrollable aggression, autism, psychosis, brain damage" or "severe sibling rivalry, affect hunger, psychopathic trends and devoid of impulse control" are all excluded as candidates for A-IGP. This would serve to exclude a majority of the children now being seen in many psychiatric facilities and raises some serious questions about the selectivity often demonstrated by professionals attempting to fulfill their responsibility for caring for those needing help. Is this selectivity based on the highly specialized nature of such techniques as A-IGP or does it reflect the inappropriateness of many of our classifications and techniques?

This book does us a service by definitely presenting criteria for patients, therapists, and procedures. The achievement or lack of achievement of these criteria should make all

of us question ourselves as well as the authors. Within their assessment of the dynamics of the treatment relationship, Slavson and Schiffer present the therapist as "the ideal human." Can we approach this state without critically assessing what we are doing in the name of therapy?

In the third section, play group therapy (PGT) is defined as "an analytic form of group treatment employed with preschool children approximately four to six years of age." This kind of definition characterizes much of the construction of this book. It lends an Alice in Wonderland quality, i.e., saying it is so makes it so. The section itself has many fine descriptions of play and its meanings, but certainly these meanings and their application should not be limited to the narrow spectrum of the four- to six-year-old. Much of this section can be applied to both individual and group therapy with children of all ages.

The final section of the book raises the interesting question of how to distinguish between that which is therapeutic and that which is therapy. In my opinion, all play contains therapeutic elements, but helping children to play within groups does not make all play groups therapeutic. Therapy must always include definition by diagnosis, identification of need and conflict, and interventions directed toward these purposes. Whether this can take place within a school setting, where the main objective is to teach, is open to question.

This book raises as many questions as it answers by its approach to its subject. Read with a critical eye, it presents many challenges to those who would treat children with the techniques it describes.

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Death and Neurosis, *by Joachim E. Meyer; translated by Margarete Nunberg. New York, N.Y., International Universities Press, 1975, 147 pp., $8.50.*

Meyer explores the relationship between conflicts and predispositions concerning mortality and the development of neuroses to handle these anxieties. He approaches this relationship by considering human reactions to death at the time of dying, to dying alone, and to thoughts of the hereafter. That man is future oriented is one of his assumptions; he also assumes that one of the major factors contributing to conflict is an awareness of approaching death before achievement or completion of an individual's life goal and/or mission.

Two means of coping with phenomena and events are presented: the concept of *attention voluntaire*, defined as a reactive readiness to deal with anything, and *attitude speculaire passive*, defined as not looking for any action to deal with a specific occurrence. Both modes of response enable a person to minimize anxiety about death to the point where he or she can react appropriately. In Meyer's opinion, anxiety is thus a barrier to coping, although anxiety can be an appropriate response so long as its intensity is not crippling and it does not interfere with reasonable and effective coping patterns.

Meyer also states that anxiety is generated by awareness of death, which is in turn minimized by "familiarization"; this term is never defined. He uses the old active-passive perspective based on the belief that fear of death stems from the inability to observe one's own death as a spectator. In my opinion this perspective is not useful because it fails to actually describe anything and because most people have thrown away the concept in favor of a theory that accounts for environmental and social as well as individual psychodynamics.

The author points out that Freud believed death did not exist in the unconscious; later he contests this position (and rightly so). For Meyer, fear of death is basic to other fears—separation anxiety, castration fear, and guilt. He reviews concepts of anxiety in general, then in terms of separation, castration, fear of love (death anxiety at the time of orgasm), and moral anxiety. He also discusses types of neuroses, such as cardiac phobia and other phobias and obsessive-compulsive neuroses.

Meyer excludes several important factors, such as age and religious philosophy, from his review of potential causes of attitudes toward death. He also fails to note anxiety resulting from a real or imagined threatened loss of control and anxiety arising out of a sense of impotence or loss of self-determination due to lack of social power or decision-making influence. This kind of death anxiety—fear of the death of one's individuality—is one of the most predominant. However, Meyer does mention that neurosis becomes a defense against anxiety resulting from a sense of annihilation of the person. He also states that suicide would occur if the person failed to bind anxiety. He does not satisfactorily account for suicide as a means of asserting potency, such as suicide by persons with terminal illnesses; aggression is not the only factor in suicide. Also, he discusses anxiety neurosis only in terms of a real fright trauma. The discussion of fright depersonalization as anticipation of death ignores its use as a defense to preserve the ego from being overwhelmed by anxiety.

The most valuable chapter in this book, "Neuroses in the Second Half of Life," views neuroses in senescence as exaggerations of character traits developed in early years. Another chapter, "Psychodynamic Aspects—Provisional Conclusions and Discussion," is written with great clarity and specificity. The relationship between neurosis and fear of death is summarized skillfully, although it involves some rehashing of earlier chapters. In "Current Conscious Attitudes Toward Death and Dying," Meyer comments that the movement away from religion has brought about some additional freedom from concern about death, primarily from the standpoint of the hereafter. He questions (with wisdom, in my opinion) whether or not this movement has actually given freedom or has generated even greater, although different, fears.

The final chapters of this book discuss death from philosophical, historical, and anthropological standpoints and depart from the main theme and thesis of the book. Although these sections offer a deeper perception and more evidence, they do not really contribute to the book's stated topic.

Perhaps the reason that the book is difficult to read stems from its translation from German into English. It seems almost to have been written in two parts: the opening chapters with much difficulty and confusion and the latter part with greater clarity and more specific references from thanatology. I feel that the section on suicide is weak, consisting of dubious theory with no clinical or empirical data to back it up.

I would not recommend this book highly; there are others better written and offering more worthwhile material.

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This Month's Reviewers

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publisher.

Own Your Own Life, *by Richard G. Abell, M.D., Ph.D., with Corlis Wilber Abell. New York, N.Y., David McKay Co., 1976, 229 pp., $9.95.*

Drink to Your Health: Alcohol Without Alcoholism, *by Junius Adams. New York, N.Y., Harper's Magazine Press (Harper & Row), 1976, 136 pp., $7.95.*

Emotional Care of the Facially Burned and Disfigured, *by Norman R. Bernstein, M.D. Boston, Mass., Little, Brown and Co., 1976, 235 pp., $12.50 (paper).*

The IQ Controversy: Critical Readings, *edited by N.J. Block and Gerald Dworkin. New York, N.Y., Pantheon Books (Random House), 1976, 542 pp., $15.95 (paper).*

The Year Book of Psychiatry and Applied Mental Health 1976, *edited by Francis J. Braceland, M.D., Sc.D., Daniel X. Freedman, M.D., Arnold J. Friedhoff, M.D., Lawrence C. Kolb, M.D., Reginald S. Lourie, M.D., and John Romano, M.D. Chicago, Ill., Year Book Medical Publishers, 1976, 420 pp., $28.95.*

Psychiatric Nursing in the Hospital and the Community, 2nd ed., *by Ann Wolbert Burgess, R.N., D.N.Sc., and Aaron Lazare, M.D. Englewood Cliffs, N.J., Prentice-Hall, 1976, 512 pp., $10.95.*

Review of Child Development Research, Vol. 3: Child Development and Social Policy, *edited by Bettye M. Caldwell and Henry N. Ricciuti. Chicago, Ill., University of Chicago Press, 1976, 572 pp., $7.95 (paper).*

The Healer's Art: A New Approach to the Doctor-Patient Relationship, *by Eric J. Cassell, M.D. Philadelphia, Pa., J.B. Lippincott Co., 1976, 233 pp., $8.95.*

The Dying Patient: A Supportive Approach, *edited by Rita E. Caughill, R.N., M.S. Boston, Mass., Little, Brown and Co., 1976, 224 pp., $6.95 (paper).*

Textbook of Clinical Psychiatry: An Interpersonal Approach, 2nd ed., *by A.H. Chapman, M.D. Philadelphia, Pa., J.B. Lippincott Co., 1976, 506 pp., $16.00.*

Psychiatric Community Mental Health Nursing Case Studies: Fifty-One Case Histories Related to Psychiatric Community Mental Health Nursing, *by Margery M. Chisholm, R.N., M.S., C.A.G.S., Ed.D., Gail G. Hamilton, R.N., M.S., Clare O'Callaghan, R.N., M.S., and Constance C. Rosenberger, R.N., M.S. Flushing, N.Y., Medical Examination Publishing Co., 1976, 321 pp., $7.50 (spiral bound).*

The Mask of Sanity: An Attempt To Clarify Some Issues About the So-Called Psychopathic Personality, 5th ed., *by Hervey Cleckley, M.D. St. Louis, Mo., C.V. Mosby Co., 1976, 462 pp., $14.95.*

The Mechanism of Mind, *by Edward de Bono. Baltimore, Md., Penguin Books, 1976, 281 pp., $1.95 (paper).*

The Survivor: An Anatomy of Life in the Death Camps, *by Terrence Des Pres. New York, N.Y., Oxford University Press, 1976, 218 pp., $10.00.*

The Satan Trap: Dangers of the Occult, *edited by Martin Ebon. Garden City, N.Y., Doubleday & Co., 1976, 276 pp., $7.95.*

Adolescent Psychiatry, Vol. IV: Developmental and Clinical Studies, *edited by Sherman C. Feinstein and Peter L. Giovacchini. New York, N.Y., Jason Aronson, 1975, 410 pp., $20.00.*

The Person Circle: A First Book on Group Psychotherapy and the Small Group Field, *by Sidney Jacob Fields, Ph.D. Hicksville, N.Y., Exposition Press, 1976, 175 pp., $8.50.*

Urban Health in America, *by Amasa B. Ford, M.D. New York, N.Y., Oxford University Press, 1976, 282 pp. $5.95 (paper).*

Group-Analytic Psychotherapy: Method and Principles, *by S.H. Foulkes. New York, N.Y., Gordon and Breach/Interface, 1975, 173 pp., $13.50.*

The Psychotic Animal: A Psychiatrist's Study of Human Delusion, *by Walter J. Garre, M.D. New York, N.Y., Human Sciences Press (Behavioral Publications), 1976, 356 pp., no price listed.*

The Person-in-Distress: On the Biosocial Dynamics of Adaptation, *by Norris Hansell IV, M.D., M.S.Hyg. New York, N.Y., Human Sciences Press (Behavioral Publications), 1976, 240 pp., no price listed.*

Probability Sampling of Hospitals and Patients, 2nd ed., *by Irene Hess, Donald C. Riedel, and Thomas B. Fitzpatrick. Ann Arbor, Mich., Health Administration Press, 1975, 207 pp., $9.75.*

Medical Nemesis: The Expropriation of Health, *by Ivan Illich. New York, N.Y., Pantheon Books (Random House), 1976, 275 pp., $8.95.*

Drugs in Psychiatry: An Ashburn Hall Manual, 4th ed., *by N. McI. James, M.B., B.S., D.P.M., R.W. Medlicott, M.B., Ch.B., and the staff of Ashburn Hall. Dunedin, New Zealand, Ashburn Hall Education and Research Foundation, 1976, 49 pp., free on request (paper).*

Salish Indian Mental Health and Culture Change: Psychohygienic and Therapeutic Aspects of the Guardian Spirit Ceremonial, *by Wolfgang G. Jilek. Toronto, Ont., Canada, Holt, Rinehart and Winston of Canada, 1974, 131 pp., $4.95 (paper).*

Handbook of Sensory Physiology, Vol. V/2: Auditory System: Physiology (CNS), Behavioral Studies, Psychoacoustics, *edited by Wolf D. Keidel and William D. Neff. New York, N.Y., Springer-Verlag New York, 1975, 480 pp., $95.20.*

The Somatosensory System, *edited by H.H. Kornhuber. Acton, Mass., Thieme/Publishing Sciences Group, 1975, 323 pp., $25.00.*

Basic Principles of Long-Term Patient Care: Developing a Therapeutic Community, *by Charles H. Kramer, M.D., and Jeannette R. Kramer. Springfield, Ill., Charles C Thomas, 1976, 355 pp., $19.75.*

The Body Reveals: An Illustrated Guide to the Psychology of the Body, *by Ron Kurtz and Hector Prestera, M.D. New York, N.Y., Harper & Row/Quicksilver Books, 1976, 148 pp., $4.95 (paper).*

The Wild Boy of Aveyron, *by Harlan Lane. Cambridge, Mass., Harvard University Press, 1976, 343 pp., $15.00.*

The Life of the Self: Toward a New Psychology, *by Robert Jay Lifton. New York, N.Y., Simon and Schuster, 1976, 181 pp., $7.95.*

The Nightmare Season, *by Arnold J. Mandell. New York, N.Y., Random House, 1976, 216 pp., $7.95.*

Behavior Modification Approaches to Parenting, *edited by Eric J. Mash, Ph.D., Lee C. Handy, Ph.D., and Leo A. Hamerlynck, Ed.D. New York, N.Y., Brunner/Mazel, 1976, 249 pp., $13.50*

Behavior Modification and Families, *edited by Eric J. Mash, Ph.D., Leo A. Hamerlynck, Ed.D., and Lee C. Handy, Ph.D. New York, N.Y., Brunner/Mazel, 1976, 352 pp., $13.50.*

Studies in Perception, *edited by Gerald M. Murch. Indianapolis, Ind., Bobbs-Merrill Co., 1976, 355 pp., $6.95 (paper).*

Emotional Flooding. New Directions in Psychotherapy, Vol. I, *edited by Paul Olsen, Ph.D. New York, N.Y., Human Sciences Press (Behavioral Publications), 1976, 257 pp., $14.95.*

Thin from Within, *by Jack D. Osman. New York, N.Y., Hart Publishing Co., 1976, 400 pp., $9.95.*

Maintaining Effective Token Economies, *edited by Roger L. Patterson, Ph.D. Springfield, Ill., Charles C Thomas, 1976, 166 pp., $14.50.*

Psychodynamics in Dental Practice, *by Martin R. Protell, D.D.S., Jack D. Krasner, Ph.D., and Benjamin Fabrikant, Ph.D. Springfield, Ill., Charles C Thomas, 1975, 269 pp., $24.00.*

Infant Psychiatry: A New Synthesis. Monographs of the Journal of the American Academy of Child Psychiatry 2, *edited by Eveoleen N. Rexford, Louis W. Sander, and Theodore Shapiro. New Haven, Conn., Yale University Press, 1976, 334 pp., $20.00.*

Communication in Organizations, *by Everett M. Rogers and Rekha Agarwala-Rogers. New York, N.Y., Free Press (Macmillan Publishing Co.), 1976, 203 pp., $10.95.*

Clinical Pharmacology of Anti-Epileptic Drugs, *edited by H. Schneider, D. Janz, C. Gardner-Thorpe, H. Meinardi, and A.L. Sherwin. New York, N.Y., Springer-Verlag New York, 1975, 361 pp., $49.50.*

Anger, *by Nancy Shiffrin. Chatsworth, Calif., Major Books, 1976, 160 pp., $1.50 (paper).*

Psychoanalysis and Self-Understanding: A Critique of Naturalistic Interpretation of Man, *by Sigurd Skirbekk. Pittsburgh, Pa., Duquesne University Press (Atlantic Highlands, N.J., Humanities Press, distributor), 1976, 148 pp., $8.00.*

Psychiatry and the Humanities, Vol. 1, *edited by Joseph H. Smith, M.D. New Haven, Conn., Yale University Press, 1976, 240 pp., $12.50.*

Stedman's Medical Dictionary, 23rd ed. *Baltimore, Md., Williams & Wilkins Co., 1976, 1,678 pp., $21.95.*

The Buffalo Creek Disaster: The Story of the Survivors' Unprecedented Lawsuit, *by Gerald M. Stern. New York, N.Y., Random House, 1976, 274 pp., $8.95.*

Sex and Gender, Vol. II: The Transsexual Experiment, *by Robert J. Stoller, M.D. New York, N.Y., Jason Aronson, 1976, 311 pp., $15.00.*

The Pain of Obesity, *by Albert J. Stunkard, M.D. Palo Alto, Calif., Bull Publishing Co., 1976, 234 pp., $10.00.*

Heresies, *by Thomas Szasz. Garden City, N.Y., Anchor Books (Anchor Press/Doubleday), 1976, 183 pp., $2.95 (paper).*

The Family—Can It Be Saved? *edited by Victor C. Vaughan III, M.D., and T. Berry Brazelton, M.D. Chicago, Ill., Year Book Medical Publishers, 1976, 307 pp., $13.95 (paper).*

Introducing WHO, *by the World Health Organization. Geneva, Switzerland, WHO (Albany, N.Y., Q Corp., distributor), 1976, 88 pp., 10 Swiss francs (paper).*

The Complete Family Nature Guide, *by Jean Reese Worthley. Garden City, N.Y., Doubleday & Co., 1976, 219 pp., $7.95.*

The Criminal Personality, Vol. I: A Profile for Change, *by Samuel Yochelson, Ph.D., M.D., and Stanton E. Samenow, Ph.D. New York, N.Y., Jason Aronson, 1976, 530 pp., no price listed.*

Highlights of the 129th Annual Meeting

THE 129TH ANNUAL MEETING of the American Psychiatric Association, which focused on the theme "The Continuing Revolution," was held in Miami Beach, Fla., May 10–14, 1976. The total registration was 9,181, including 4,075 members, 4,204 nonmembers, 804 scientific exhibitors, 98 members of the press, 408 program participants, and 2,641 spouses and families of members.

The opening session, on Monday morning, May 10, was brought to order by Judd Marmor, M.D., 104th President of the Association. Official greetings were extended by the Honorable Stephen P. Clark, Mayor of Dade County, and the Honorable Harold Rosen, Mayor of the City of Miami Beach.

Dr. Marmor introduced Dr. Robert E. Jones, Associate Medical Director, Institute of the Pennsylvania Hospital, Philadelphia, Pa., and Chairperson of the Benjamin Rush House Committee. Dr. Jones described progress on the Benjamin Rush National Park in Philadelphia, to which the Association has been the largest contributor. In recognition of this contribution, Dr. Jones presented the Benjamin Rush Gavel to Dr. Marmor to be placed in the American Psychiatric Association Museum. Dr. Marmor then introduced Mr. Franklin Roberts, producer of a one-act play depicting scenes from the life of Benjamin Rush, "The Revolution Is Not Over," presented at the opening session through the courtesy of Merck Sharp & Dohme.

Following the play, Dr. Marmor introduced the distinguished guests, who included the following: Prof. W. Linford Rees, President of the Royal College of Psychiatrists and Treasurer of the World Psychiatric Association; Dr. Peter A. Martin, President of the American College of Psychiatrists; Dr. Irving N. Berlin, President of the American Academy of Child Psychiatry; Dr. Walter Goldschmidt, President of the American Anthropological Association; Dr. Gerald J. Sarwer-Foner, President of the American Academy of Psychiatry and the Law; Dr. Earl G. Witenberg, President of the American Academy of Psychoanalysis; Dr. Michael Shepherd, Professor of Epidemiology, Psychiatric Institute, University College Hospital, London; Dr. Milton Greenblatt, President of the American Board of Psychiatry and Neurology and President of the American Association for Social Psychiatry; Dr. Douglas D. Bond, President of the American College of Psychoanalysts; Dr. Jere W. Annis, Vice-Chairman of the American Medical Association's Board of Trustees; Dr. Bernice Sachs, Past President and representative of the American Medical Women's Association; Dr. Herbert S. Gaskill, President of the American Psychoanalytic Association; Dr. Tsung-yi Lin, President of the World Federation for Mental Health; Dr. Wilbert J. McKeachie, President of the American Psychological Association; Dr. Albert J. Silverman, President of the American Psychosomatic Association; Dr. Gustavo A. Lage, President of the American Society for Adolescent Psychiatry; Mr. George Blank, representing the Association of Mental Health Administrators; Chaplain Joseph B. Brady, President of the Association of Mental Health Clergy; Dr. Jean Baptiste Boulanger, President of the Canadian Psychiatric Association; Dr. Henry Podlewski, First Vice-President of the Caribbean Psychiatric Association; Dr. R. Kusumanto Setyonegoro, representing the Indonesian Psychiatric Society; Mr. Sheldon R. Goldstein, Executive Director of the Florida Chapter of the National Association of Social Workers; Dr. Walter H. Wellborn, Jr., President of the National Association of Private Psychiatric Hospitals; Ms. Ruth Lewis, Coordinator for Psychiatric and Mental Health, American Nurses' Association; Dr. Rene Gonzalez, representing the World Health Organization in his role as Regional Advisor in Mental Health, WHO-Pan American Health Organization; Dr. Howard P. Rome, President of the World Psychiatric Association; and Dr. Ruben Hernandez Serrano, General Secretary of the Venezuelan Psychiatric Society and the College of Physicians of the Miranda State University, Caracas.

Dr. Marmor then called on Prof. W. Linford Rees, who commented on the plans for the VI World Congress of Psychiatry (which the Association is cosponsoring), to be held in Honolulu, Hawaii, August 29–September 3, 1977. Dr. Tsung-yi Lin, President of the World Federation for Mental Health, extended an invitation to the Federation's World Congress on the theme "Today's Priorities in Mental Health," which will be held in Vancouver, B.C., Canada, August 21–26, 1977.

Dr. Marmor extended the Association's appreciation to Dr. Peter Martin and the Program Committee for their excellent work. Dr. Martin noted that this year for the first time there was a specific program for spouses within the scientific program and mentioned the availability of continuing education courses for AMA Category I credit. Dr. Marmor then welcomed Ronald A. Shellow, M.D., Co-Chairperson, Lo-

cal Arrangements Committee, who extended an invitation to a Latin fiesta at the close of the annual meeting.

Vice-President Daniel X. Freedman, M.D., presented Dr. Marmor, who gave an eloquent address on "Psychiatry 1976—The Continuing Revolution." Vice-President Jack A. Wolford, M.D., introduced Robert W. Gibson, M.D., who responded thoughtfully as the President-Elect. (The texts of these addresses are published elsewhere in this issue of the *Journal*.)

The opening session closed with organ music by John E. Fryer, M.D. Dr. Marmor adjourned the meeting with an invitation to a reception held by the officers of the Association immediately thereafter.

SCIENTIFIC SESSIONS

The scientific sessions began Monday afternoon, May 10, There were 321 papers presented in regular sessions, as well as 30 papers on new research presented in several sessions throughout the week. There were 86 morning panels and 59 evening panels, 7 videotaped sessions, and 35 films in 14 sessions.

The Solomon Carter Fuller Lecture, "Toward a Second American Revolution," was given by John Hope Franklin, Ph.D., Chairman, Department of History, University of Chicago. Michael Shepherd, M.D., Professor of Epidemiology, Psychiatric Institute, University College Hospital, London, gave the Adolf Meyer Lecture, "The Life and Works of Sir Aubrey Lewis." Jaime Benitez, Resident Commissioner, Office of the Commonwealth of Puerto Rico, Washington, D.C., gave the Simon Bolivar Lecture, "Toward Understanding the Historical Role of Latin America and Puerto Rico in Its Relation with the United States: A Perspective for the Future." The Benjamin Rush Lecture, "The Significance of Boundaries in Nineteenth-Century American Experience," was given by David Brion Davis, Ph.D., Professor of History, Yale University, New Haven, Conn. The Seymour Vestermark Memorial Lecture, "The Function of Participation as a Learning Teaching Process," was presented by Raquel E. Cohen, M.D., Associate Professor of Psychiatry, Harvard Medical School, Boston, Mass. There were 5 special lectures: "Psychoanalysis and Historical Analysis," by Elizabeth Fox-Genovese, Ph.D., Assistant Professor of History and Liberal Arts, University of Rochester, Rochester, N.Y.; "A Bicentennial Lecture: Benjamin Rush and Those Who Came After Him," by Francis J. Braceland, M.D., Editor, *American Journal of Psychiatry*, and Senior Consultant, Institute of Living, Hartford, Conn.; "Life, Liberty, and Philippe Pinel," by Dora Weiner, Ph.D., Associate Professor, Department of History, Manhattanville College, Purchase, N.Y.; "In Praise of the Cognitive Emotions," by Israel Scheffler, Ph.D., Victor S. Thomas Professor of Education and Philosophy, Harvard University, Cambridge, Mass,; and "Fear of Success," by Martina S. Horner, Ph.D., President, Radcliffe College, Cambridge, Mass.

BUSINESS SESSION

The business session was convened as a meeting of the Assembly of District Branches acting for the membership in receiving reports of the officers and actions of the Board of Trustees. The meeting was held on Tuesday, May 11, in the South Hall of the Miami Beach Convention Center. Dr. Marmor presided. After a memorial to deceased Fellows and members, Henry Brosin, M.D., presented a brief tribute to the contributions of Dr. Malcolm Farrell, a former Speaker of the Assembly of District Branches, who died August 5, 1975.

Eugene A. Hargrove, M.D., Chairperson, Committee of Tellers, recorded the results of the election of officers and trustees and of the vote on the proposed amendments to the Constitution and By-Laws. There will be a run-off election between Frank Ayd, Jr., M.D., and Jack Weinberg, M.D., for the office of President-Elect. A run-off election will also be held for the office of Vice-President (to serve a term of two years); the two candidates are Alan A. Stone, M.D., and Jack A. Wolford, M.D. Charles B. Wilkinson, M.D., was certified as Treasurer; Nancy C.A. Roeske, M.D., as Trustee-at-Large; William B. Spriegel, M.D., as Area IV Trustee; and David Starrett, M.D., as Area VII Trustee. A run-off election will be held between Lane Ameen, M.D., and Ben W. Feather, M.D., for Area I Trustee. In addition, the Committee of Tellers certified the approval of amendments to the following sections of the Constitution and By-Laws: Chapter 3, Section 3; Chapter 8, Section 5; Chapter 9, Section 1; and Chapter 10, Section 1. The report of the Committee was accepted. Two referenda by petition were also certified approved.

The reports of the officers to the membership followed. (The floor was open to questions following each report, and all reports were accepted as read by the Assembly.) Jules H. Masserman, M.D., summarized his 26-page Secretary's report, which included the principal actions of the Board of Trustees and of the Executive Committee. Jack Weinberg, M.D., gave the report of the Treasurer, and Miltiades L. Zaphiropoulos, M.D., gave the report of the Speaker of the Assembly of District Branches. Irwin N. Perr, M.D., J.D., spoke as Speaker-Elect. Kent Ravenscroft, Jr., M.D., Chairperson of the Committee on Constitution and By-Laws, reported on the Committee's work on proposed revisions of the Constitution and By-Laws in accordance with the mandates of the Key Conference. Laura E. Morrow, M.D., presented the report of the Membership Committee. Melvin Sabshin, M.D., presented the report of the Medical Director.

Dr. Marmor then presented plaques to Dr. Zaphiropoulos, the retiring Speaker, and to Jack A. Wolford, M.D., the retiring Vice-President. John P. Spiegel, M.D., presented the President's Badge to Dr. Marmor.

Dr. Marmor then adjourned the business session and called the annual forum to order. A question related to the desire for more sessions at the annual meeting qualifying for AMA Category I credit was referred to Dr. Henry Work, who reported that the Council on Medical Education and Career Development and the Program Committee plan substantial efforts in this area at forthcoming meetings. Dr. Marmor then adjourned the annual forum.

MEETINGS OF THE BOARD OF TRUSTEES

The Board of Trustees met in regular sessions on Sunday, May 9, and Thursday, May 13. Transactions will be reported by the Secretary.

CONVOCATION

The 20th Convocation of Fellows was held in the Grand Ballroom of the Fontainebleau Hotel on Wednesday, May 12. Dr. Marmor presided. After the processional march, Dr.

Marmor called the convocation to order. The Life Fellows were inducted by Robert Gibson, M.D., President-Elect.

Life Fellows and life members who have been in the Association for 50 years (1926–1976) were introduced by Dr. Marmor. They are S. Spafford Ackerly, M.D., Louisville, Ky.; Leo H. Bartemeier, M.D., Baltimore, Md.; Eugene N. Boudreau, M.D., Syracuse, N.Y.; Betsy Coffin, M.D., Detroit, Mich.; Laurence Martin Collins, M.D., Convent Station, N.J.; Olive Alfreda Cooper, M.D., Springfield, Mass.; John Morris Dorsey, M.D., Detroit, Mich.; Joseph Epstein, M.D., New York, N.Y.; Harry Goldsmith, M.D., Baltimore, Md.; Emmett Francis Hoctor, M.D., Farmington, Mo.; Nolan D.C. Lewis, M.D., Frederick, Md.; Alva Gwin McCord, M.D., Albany, N.Y.; Curtis Tuttle Prout, M.D., Orleans, Mass,; Baruch Silverman, M.D., Montreal, Que., Canada; Lauren Howe Smith, M.D., Philadelphia, Pa.; and Francis Elwood Weatherby, M.D., Wernersville, Pa.

Dr. Ernst Peter Berner, Vienna, Austria; Dr. John Hope Henderson, Edinburgh, Scotland; Dr. A. Venkoba Rao, Madurai, India; and Dr. R. Kusumanto Setyonegoro, Jakarta, Indonesia, were designated Corresponding Fellows.

The presentation of awards followed. Dr. Marmor presented the Distinguished Service Award—given to APA members "whose distinguished careers have ennobled the profession of psychiatry"—to Ms. Anna Freud, Director, Hampstead Child Therapy Clinic, London, England (Jeanne Spurlock, M.D., accepted the award for Ms. Freud); to Francis J. Braceland, M.D., Editor, *American Journal of Psychiatry*, and Senior Consultant, Institute of Living, Hartford, Conn., and Past President of the Association, 1956–1957; and to Howard P. Rome, M.D., Head, Section on Psychiatry, Mayo Clinic, Rochester, Minn., and Past President of the Association, 1965–1966.

The Lester N. Hofheimer Prize for Research, presented by Marvin Stein, M.D., was given to Joseph Mendels, M.D., Professor of Psychiatry, University of Pennsylvania, Philadelphia, Pa., for a set of related manuscripts covering a range of studies dealing with affective disorders. This award is given to "U.S. research investigators for outstanding accomplishment in psychiatry and mental hygiene."

George E. Gardner, M.D., presented the Agnes Purcell McGavin Award to Eveoleen N. Rexford, M.D., Divisional Professor, Harvard University, Cambridge, Mass., and Eleanor Pavenstedt, M.D., Tiverton, R.I., for "oustanding contributions to the prevention of mental disorders in children."

Eric Plaut, M.D., presented the Robert T. Morse Writers Award to Ms. Lucy Freeman, New York, N.Y., science writer, reporter, and author of 46 popular books. This award honors "popular writers who have made major contributions to the public understanding of psychiatry over an extended period of time."

Alan A. Stone, M.D., Professor of Law and Psychiatry, Faculty of Law and Faculty of Medicine, Harvard University, Cambridge, Mass., received the Manfred S. Guttmacher Award for "an outstanding contribution to forensic psychiatry in the form of a book, monograph, or paper" for his monograph *Mental Health and Law: A System in Transition*, published by the U.S. Department of Health, Education, and Welfare, Washington, D.C., in 1975.

The Seymour D. Vestermark Prize for "outstanding contributions to undergraduate and postgraduate medical education, to continuing education, and to the education of behavioral scientists for research" was presented by Louis A. Gottschalk, M.D., to Raquel E. Cohen, M.D., Associate Professor of Psychiatry, Harvard Medical School, Boston, Mass.

Robert J. Campbell III, M.D., presented the District Branch Newsletter of the Year Award, given "to recognize the overall excellence of outstanding newsletters published by the District Branches of the Association from the standpoint of editorial content, attractiveness of format, and usefulness in furthering communication within the profession," to the Central California Psychiatric Society Newsletter, Don A. Rockwell, M.D., Editor.

The Isaac Ray Award, given to "recognize psychiatrists, attorneys, and judges who have made outstanding contributions to legal psychiatry," was presented by Naomi Goldstein, M.D., to Jonas Robitscher, J.D., M.D., Henry R. Luce Professor of Law and Behavioral Sciences, Emory University School of Law, Atlanta, Ga.

Following the presentation of awards, Dr. Marmor introduced George Wald, Ph.D., Higgins Professor of Biology, Harvard University, the Biological Laboratories, Cambridge, Mass., who gave a scholarly and inspirational address, the William C. Menninger Memorial Convocation Lecture, "Life in the Universe." The Convocation then recessed.

SPOUSES' ACTIVITIES AND ENTERTAINMENT

The Local Arrangements Committee, co-chaired by Ronald A. Shellow, M.D., and Doris Shellow, prepared a schedule of activities that began with a dutch treat welcome party on Sunday night at the Doral Hotel. Other activities included tours of outstanding homes in Miami, the Seaquarium and Parrot Jungle, Palm Beach, and other attractions in the Miami area. There were several opportunities for outdoor activities, including golf and tennis tournaments and sailing and fishing trips. The Starlight Roof of the Doral Hotel was reserved for APA members' enjoyment at a "nightclub evening." The families of APA officers were honored at a champagne brunch at the Fontainebleau Hotel on Tuesday. A cruise dinner-dance was held on Thursday evening. The week's entertainment ended with a Latin fiesta luncheon at the Doral Beach Hotel on Friday, May 14.

ALLIED MEETINGS

The following professional associations also held meetings in or near Miami during the week of May 8–15: the American Academy of Child Psychiatry, the American Academy of Psychiatry and the Law, the American Academy of Psychoanalysis, the American Association of Chairmen of Departments of Psychiatry, the American Association for Social Psychiatry, the American College of Psychoanalysts, the American Society for Adolescent Psychiatry, the American Society for Phenomenological Psychotherapy, the Association of Mental Health Clergy, the Behavior Therapy and Research Society, and the Eastern Psychoanalytic Association.

JULES H. MASSERMAN, M.D.
Secretary, American Psychiatric Association

Coverage and Utilization of Care for Mental Conditions Under Health Insurance —Various Studies, 1973–74

By Louis S. Reed, Ph.D.
Consultant in Health Economics, American Psychiatric Association

This book reports six studies that add to the growing body of data demonstrating the feasibility of covering mental illness under health insurance. Although in some ways it may be considered a supplement to APA's 1972 book **HEALTH INSURANCE AND PSYCHIATRIC CARE: UTILIZATION AND COST** (Reed, Myers, and Scheidemandel), all of the data are new. The studies cover the following areas:

- Utilization of mental benefits under the Blue Cross and Blue Shield plan for federal employees, documenting that a "plateau" in the use of these benefits was reached in 1973–74.
- Comparison of benefits for mental and other illnesses under selected employee health benefit plans.
- Coverage of mental illness under collective bargaining agreements of selected unions.
- Utilization of care for mental conditions under the Canadian health insurance program, which gives the same coverage for mental as for other conditions.
- Updating of information on Blue Cross benefits for hospital care of mental illness.
- Data from selected Blue Cross and Blue Shield plans on coverage and utilization of mental conditions, with emphasis on major medical coverage.

80pp. Paperbound

Single copy, $4.00; 10–49 copies; $3.80 each; 50 or more copies, $3.20 each.

SPECIAL OFFER: One copy of this book (regular price, $4.00) and one copy of **HEALTH INSURANCE AND PSYCHIATRIC CARE: UTILIZATION AND COST** (regular price, $6.50) for $8.50.

Publications Services Division
American Psychiatric Association
1700 18th St., N.W., Washington, D.C. 20009

Please send me _____ copies of **COVERAGE AND UTILIZATION OF CARE FOR MENTAL CONDITIONS UNDER HEALTH INSURANCE—VARIOUS STUDIES, 1973–74**. Single copy, $4.00; 10–49 copies, $3.80 each; 50 or more copies, $3.20 each.

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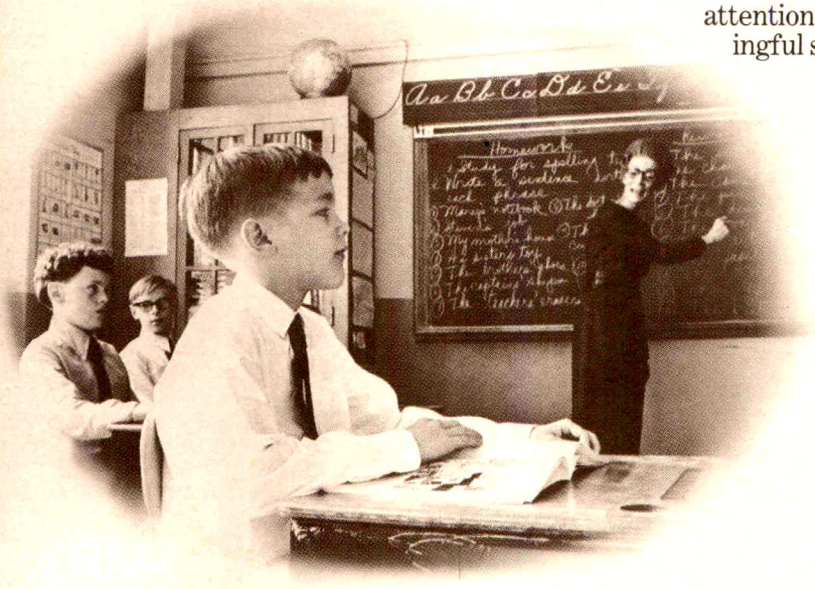
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"...a considerable decrease of hyperactivity...."[1]
Knobel, 1962



Over a decade of controlled studies and clinical experience has shown the effectiveness of Ritalin in reducing the hyperactivity,[1-3] distractibility,[1,4,5] and disorganized behavior[1-8] in the MBD child.

By lessening the effects of motor and attentional disorders, Ritalin can help the MBD child to better focus his attention on meaningful stimuli and thus can often improve cognition and promote learning.[6,9]

And side effects – insomnia and appetite loss – with Ritalin have occurred less frequently than with dextroamphetamine.[10,11]

Indeed, Ritalin is currently a drug of choice in many MBD situations,[10,12] and can prove to be an important element in many complete remedial programs for MBD.

Therapy with Ritalin should be undertaken only after a medical diagnosis of MBD has been made. Drug treatment is not indicated for all children with MBD.

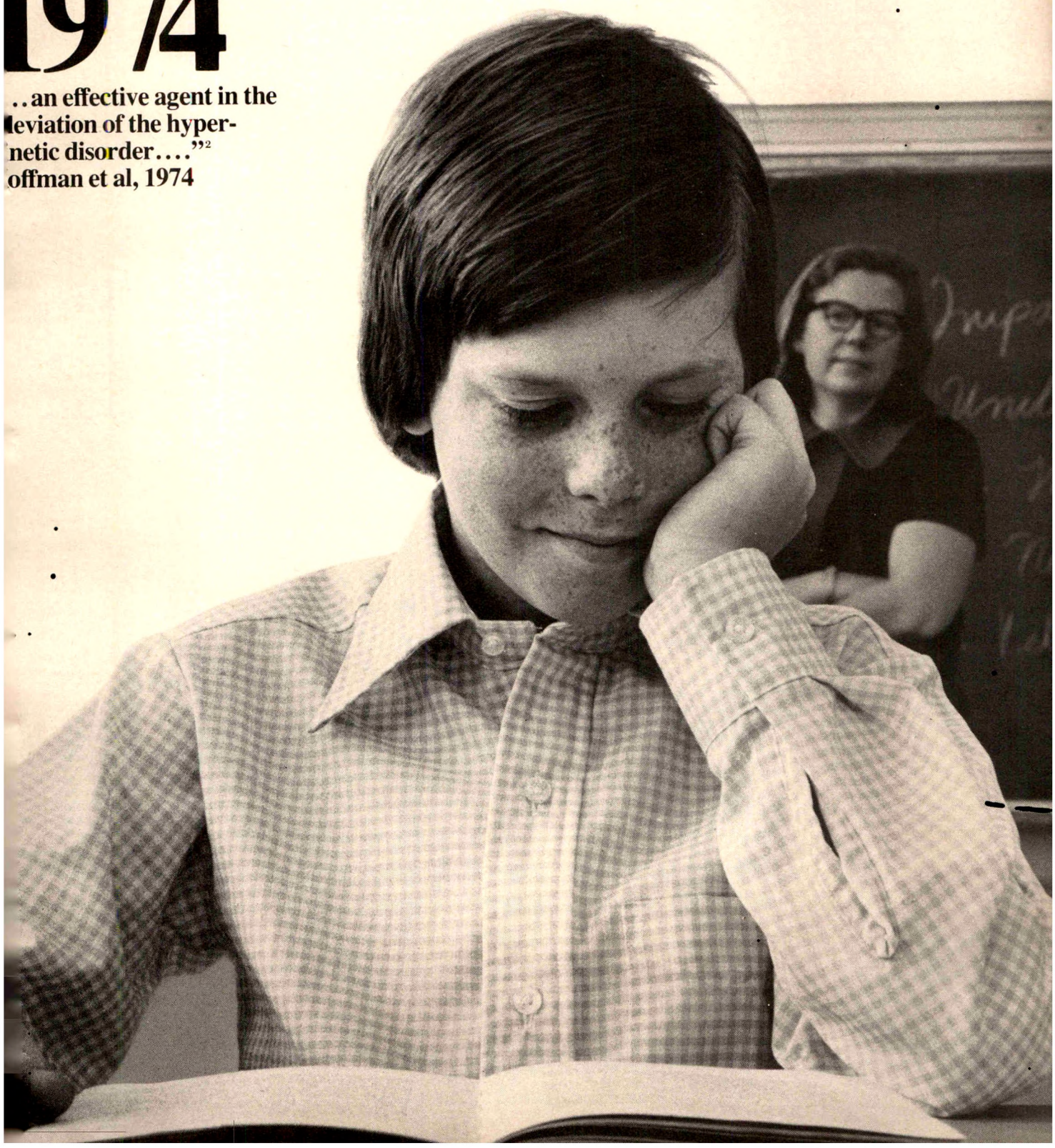
Dosage should be periodically interrupted. Often, these interruptions reveal some "stabilization" in the child's behavior even without medication, permitting a reduction in dosage and eventual discontinuance of drug therapy.

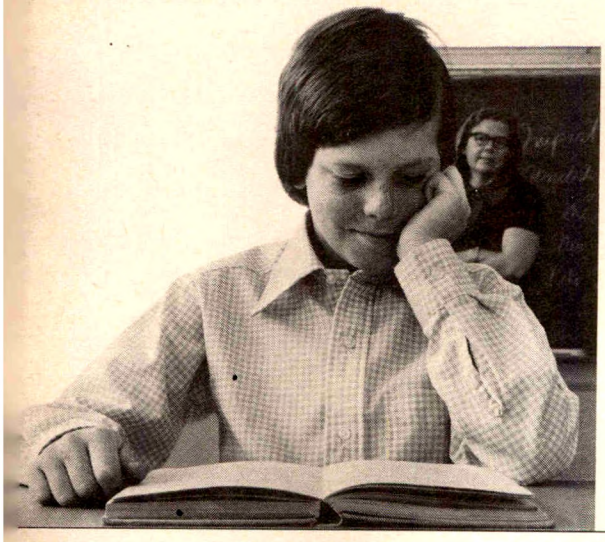
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..an effective agent in the
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TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.

Characteristics commonly reported include: chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; minor neurological signs and abnormal EEG. Learning may or may not be impaired. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis. Appropriate educational placement is essential and psychosocial intervention is generally necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin should not be used in children under six years, since safety and efficacy in this age group have not been established.

Sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available. Although a causal relationship has not been established, suppression of growth (*ie*, weight gain and/or height) has been reported with long-term use of stimulants in children. Therefore, children requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary.

Periodic CBC, differential, and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported. Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: leukopenia and/or anemia; a few instances of scalp hair loss.

In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.

Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Accu-pak® blister units of 100

Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

References:

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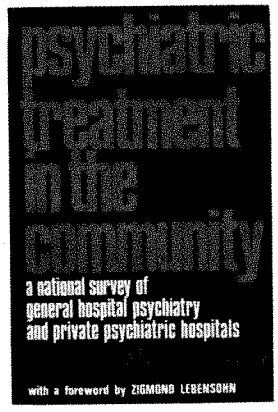
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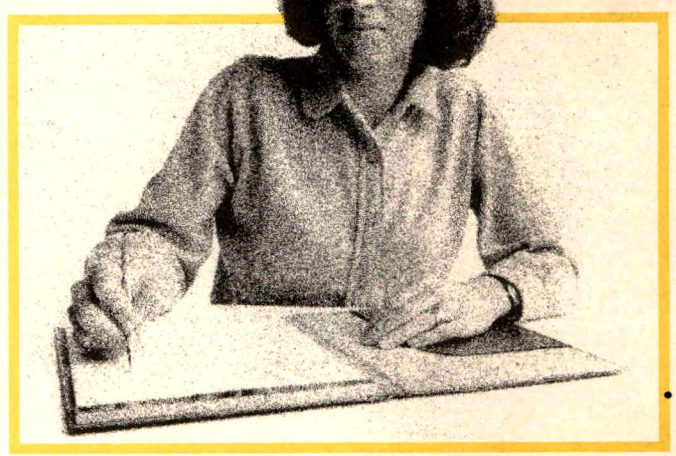
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The antidepressant you can prescribe at night to work all day

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: To relieve symptoms of depression (notably endogenous depression) and depression accompanied by anxiety.

Contraindications: Known hypersensitivity. Do not use with monoamine oxidase (MAO) inhibitors or within at least 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Use not recommended during acute recovery phase after myocardial infarction.

Warnings: May block action of guanethidine or similar antihypertensives. Use with caution in patients with history of seizures, urinary retention, angle closure glaucoma, increased intraocular pressure. Closely supervise cardiovascular patients, hyperthyroid patients and those receiving thyroid medications. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, including amitriptyline HCl, especially in high doses. Myocardial infarction and stroke reported with use of this class of drugs.) May impair alertness; warn against hazardous occupations or driving a motor vehicle during therapy. Weigh potential benefits against hazards during pregnancy, the nursing period and in women of childbearing potential. Not recommended in children under 12.

Precautions: May exaggerate symptoms in schizophrenic and paranoid patients, or shift manic-depressives to manic stage; reduce dose or administer major tranquilizer concomitantly. Close supervision and careful dose adjustments required when given with anticholinergic or sympathomimetic agents. Exercise care in patients receiving large doses of ethchlorvynol; transient delirium reported with concomitant administration. May enhance effects of alcohol, barbiturates and other CNS depressants. Because of the possibility of suicide in depressed patients, do not permit easy access to large drug quantities in these patients. Because it may increase hazards of electroshock therapy, limit concomitant use to essential treatment. If possible, discontinue drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: Note: This list includes a few adverse reactions not reported with this specific drug but requiring consideration because of similarities of tricyclic antidepressants. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia. purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache and malaise. These are not indicative of addiction.

Dosage: Initiate at low levels; increase gradually, watching for signs of intolerance. As long as 30 day may elapse before adequate antidepressant effect develops; sedative effect may be noted earlier. *Initial Adult Dosage:* Outpatients — 25 mg t.i.d.; may be increased to 150 mg/day. Add increased drug to afternoon and/or bedtime doses. Alternate — 50 to 100 mg h.s., gradually increasing h.s. dos up to 150 mg/day. Hospitalized Patients — Up to 100 mg/day; increase gradually to 200 mg if necessary. A few patients may require 300 mg/da *Adolescent and Elderly Patients:* In general, 10 m t.i.d. with 20 mg h.s. may be satisfactory for those who do not tolerate higher doses. *Maintenance Dosage:* With symptomatic improvement, reduce dosage to lowest amount that gives relief, usually 25 mg b.i.d. to q.i.d., or 10 mg q.i.d. Continue maintenance therapy 3 months or longer to avoid relapse.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestations and treatment.

Supplied: 10-mg, 25-mg, 50-mg and 75-mg scored tablets — bottles of 100 and 500; Prescription Pak of 60 (10 mg, 25 mg and 50 mg) or 30 (75 mg), available singly and in trays of 10.

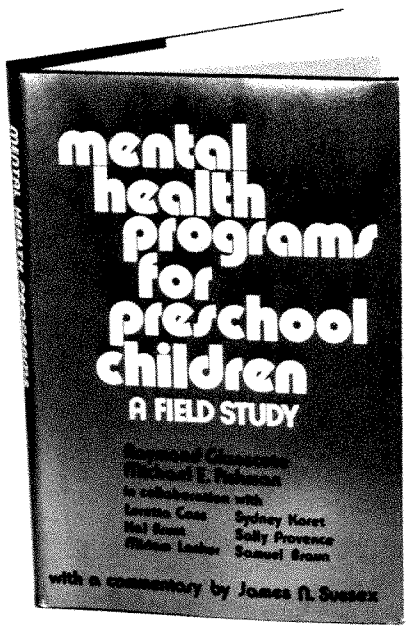
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This latest Joint Information Service field study provides a concise, comprehensive overview of the complex matter of the very young American child and his mental health, and then describes in intimate detail seven unique programs for pre-school children with problems—from North Hollywood's Dubnoff Center, emphasizing education as its primary therapeutic modality, to Baltimore's Martin Luther King, Jr. Parent-Child Center, serving two housing projects, served by Johns Hopkins, and largely governed by its own people. All different in treatment approach and philosophy, the programs described are uniform in their dedication to innovation in improving service to the emotionally disturbed very young child, and, equally, to the emotional well being of all young children.

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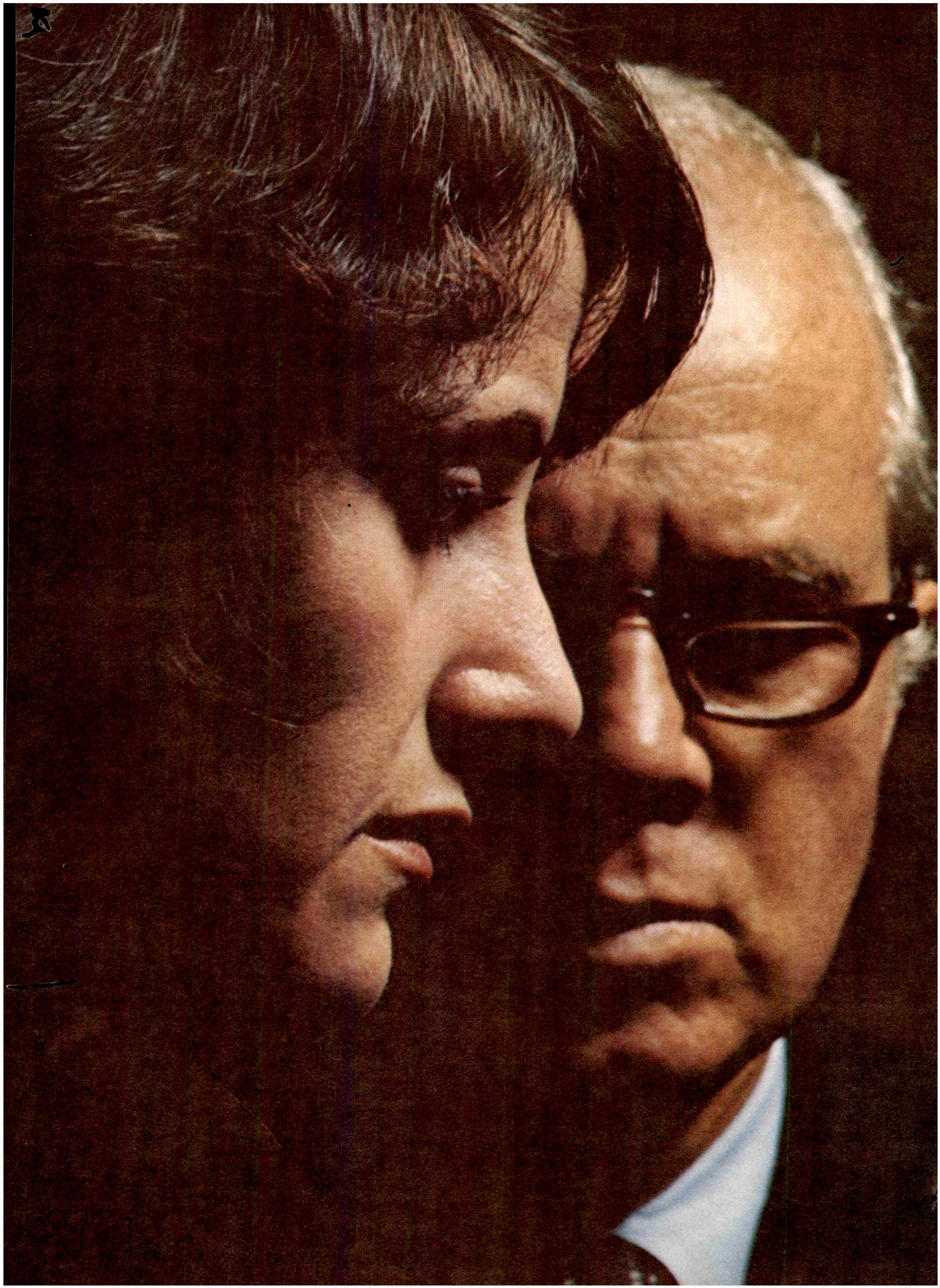
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There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

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TRIAVIL is contraindicated in CNS depression from drugs; in the presence of evidence of bone marrow depression; and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to other drugs or mask other disorders. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

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For a brief summary of prescribing information, please turn to the following page.

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CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

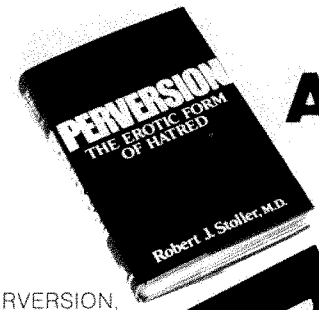
Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

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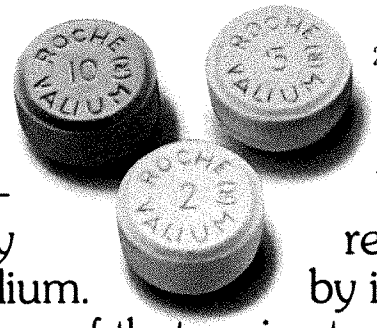
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Pharmacokinetic predictability. Valium has demonstrated a highly reliable and consistent pattern of absorption, distribution, metabolism and excretion—one more indication of its overall reliability of performance.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

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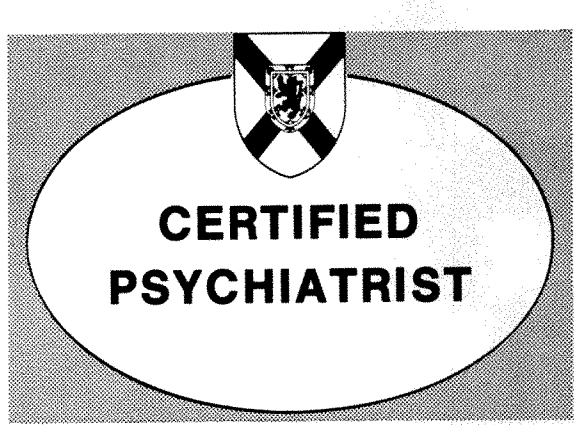
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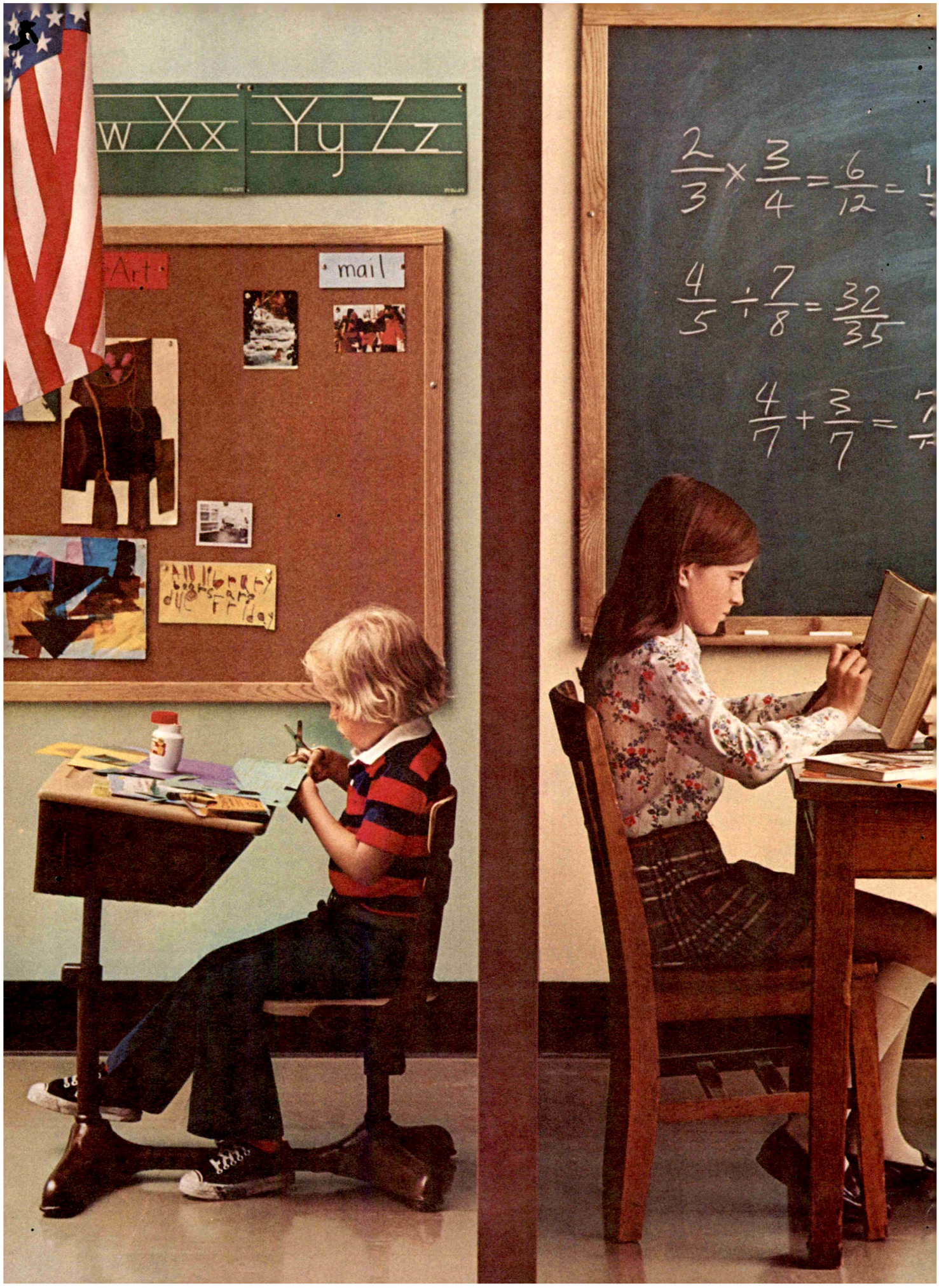


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The vulnerable ages

The first epileptic seizure is most likely to occur during early childhood and at the onset of puberty

About 9 out of 10 epileptics experience their first seizure before the age of 20—with the highest incidence between 5 and 7, when children start school, and at the onset of puberty, a time of physiological and psychic turmoil.[1] The most common type, grand mal, occurs in approximately 75% of epileptic children,[1] and more than 50% of patients who suffer initially from petit mal develop grand mal seizures before they reach the age of 16.[2]

Mysoline (primidone) for control of grand mal, psychomotor and focal epilepsy

At the onset and afterwards — used alone or as concomitant therapy, MYSOLINE may reduce the frequency and severity of major motor seizures—or even eliminate them. *Excellent* for control of grand mal. Valuable for control of psychomotor[1,3,4] and focal epilepsy as well.[5]

Add Mysoline when control with other anticonvulsants is inadequate—As concomitant therapy, MYSOLINE can improve seizure control in grand mal and psychomotor epilepsy. The combined use of phenobarbital, diphenylhydantoin, and MYSOLINE may have additive anticonvulsant effects without additive side effects.[6]

Change to Mysoline when other anticonvulsants fail—A changeover to MYSOLINE is frequently warranted when other anticonvulsants must be discontinued because of important side effects, or when grand mal seizures are refractory to phenobarbital, with or without diphenylhydantoin.[7]

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Mysoline® (primidone)

Tablets 250 mg.
50 mg.
Suspension 250 mg./5 cc.

May be the start of a better life for the epileptic

See following page of advertisement for prescribing information.

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may be the start of a better life for the epileptic

initial and maintenance therapy for
grand mal, psychomotor and focal epilepsy

BRIEF SUMMARY
(For full prescribing information, see package circular.)

MYSOLINE® Brand of PRIMIDONE
Anticonvulsant

ACTIONS: MYSOLINE acts on the central nervous system to raise seizure threshold or alter seizure pattern. The mechanism(s) of action of anticonvulsant drugs is not known.

Primidone has anticonvulsant activity *per se*. In addition, its two metabolites possess anticonvulsant qualities. The major metabolite is phenylethylmalonamide (PEMA); the other is phenobarbital. In addition to its own anticonvulsant potential, PEMA potentiates phenobarbital.

INDICATIONS: MYSOLINE, either alone or used concomitantly with other anticonvulsants, is indicated in the control of grand mal, psychomotor, and focal epileptic seizures. It may control grand mal seizures refractory to other anticonvulsant therapy.

CONTRAINDICATIONS: Primidone is contraindicated in: 1) patients with porphyria and 2) patients who are hypersensitive to phenobarbital (see ACTIONS).

WARNINGS: The abrupt withdrawal of antiepileptic medication may precipitate status epilepticus.

The therapeutic efficacy of a dosage regimen takes several days before it can be assessed.

Use in pregnancy: Recent reports strongly suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Reference has been made to primidone in several cases in which it was used *in combination* with other anticonvulsants; but its teratogenicity has not been conclusively demonstrated. The possibility exists that other factors, *e.g.*, genetic factors or the epileptic condition, may contribute to the higher incidence of birth defects. The data also indicate that the great majority of mothers receiving anticonvulsant medication deliver normal infants.

Anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent major seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and risk to both mother and the unborn child.

When the nature, frequency, and severity of the seizures do not pose a clear threat to the patient, good medical practice requires that the physician weigh the expected therapeutic benefit of anticonvulsant therapy against possible risk on an individual basis.

Neonatal hemorrhage, with a coagulation defect resembling vitamin K deficiency, has been described in newborns whose mothers were taking primidone and other anticonvulsants. Pregnant women under anticonvulsant therapy should receive prophylactic vitamin K_1 therapy for one month prior to, and during, delivery.

The physician should weigh all of the foregoing considerations when treating and counseling epileptic women of childbearing potential.

PRECAUTIONS: The total daily dosage should not exceed 2 Gm. Since MYSOLINE therapy generally extends over prolonged periods, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

In nursing mothers: There is evidence that in mothers treated with primidone, the drug appears in the milk in substantial quantities. Since tests for the presence of primidone in biological fluids are too complex to be carried out in the average clinical laboratory, it is suggested that the presence of undue somnolence and drowsiness in nursing newborns of MYSOLINE-treated mothers be taken as an indication that nursing should be discontinued.

ADVERSE REACTIONS: The most frequently occurring early side effects are ataxia and vertigo. These tend to disappear with continued therapy, or with reduction of initial dosage. Occasionally, the following have been reported: nausea, anorexia, vomiting, fatigue, hyperirritability, emotional disturbances, sexual impotency, diplopia, nystagmus, drowsiness, and morbilliform skin eruptions. Occasionally, persistent or severe side effects may necessitate withdrawal of the drug. Megaloblastic anemia may occur as a rare idiosyncrasy to MYSOLINE and to other anticonvulsants. The anemia responds to folic acid, 15 mg. daily, without necessity of discontinuing medication.

DOSAGE AND ADMINISTRATION: The average adult dose is 0.75 to 1.5 Gm. per day. The initial dose is 250 mg. Increments of 250 mg. are added, usually at weekly intervals, to tolerance, or therapeutic effectiveness, up to daily doses not exceeding 2.0 Gm. A typical dosage schedule for the introduction of MYSOLINE (primidone) is as follows:

Adults and Children Over 8 Years of Age

1st Week 250 mg. daily at bedtime	*2nd Week* 250 mg. b.i.d.
3rd Week 250 mg. t.i.d.	*4th Week* 250 mg. q.i.d.

In children under 8 years of age, maintenance levels are established by a similar schedule, but at one-half the adult dosage. It is best to begin with 125 mg., with gradual weekly increases of 125 mg. a day, to a daily total usually between 500 mg. and 750 mg.

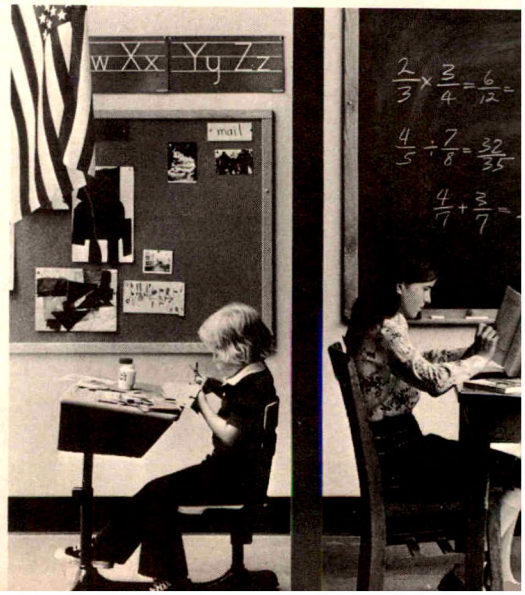
In patients already receiving other anticonvulsants: MYSOLINE should be gradually increased as dosage of the other drug(s) is maintained or gradually decreased. This regimen should be continued until satisfactory dosage level is achieved for combination, or the other medication is completely withdrawn. When therapy with this product alone is the objective, the transition should not be completed in less than two weeks.

MYSOLINE 50 mg. Tablet can be used to practical advantage when small fractional adjustments (upward or downward) may be required, as in the following circumstances:

- for initiation of combination therapy
- during "transfer" therapy
- for added protection in periods of stress or stressful situations that are likely to precipitate seizures (menstruation, allergic episodes, holidays, etc.)

HOW SUPPLIED: MYSOLINE *Tablets*—No. 430—Each tablet contains 250 mg. of primidone (scored), in bottles of 100 and 1,000. Also in unit dose package of 100. No. 431—Each tablet contains 50 mg. of primidone (scored), in bottles of 100 and 500. MYSOLINE *Suspension*—No. 3850—Each 5 cc. (teaspoonful) contains 250 mg. of primidone, in bottles of 8 fluid-ounces.

References: 1. Livingston, S.: Comprehensive Management of Epilepsy in Infancy, Childhood and Adolescence, Springfield, Ill., Charles C Thomas, 1972, pp. 6, 7, 584. 2. Grossman, H.J.: Ill. Med. J. *135*:260 (Mar.) 1969. 3. Scholl, M.L., in Conn, H.F.: Current Therapy 1973, Philadelphia, Saunders, 1973, pp. 675-7. 4. Metrick, S.: C.M.D. *37*:49 (Jan.) 1970. 5. Forster, F.M.: Med. Clin. North Am. *47*:1579 (Nov.) 1970. 6. White, P.T.: Wis. Med. J. *68*:178 (Apr.) 1969. 7. Millichap, J.G.: Drug Ther. *1*:15 (Oct.) 1971.



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Basic tools of primitive psychiatry



Mankpo: Sceptres or staffs used by the Heviosso (lightning God) cult in medical ceremonies among the Ewe of Tongo and Fon of Dahomey. *Right,* staff with leopard's head, bared teeth and tongue (Ewe, Togo). *Left,* staff with ram's head—the sacred animal of the Heviosso—in the form of a serpent symbolizing the fire-spitting rainbow God of healing (Fon, Dahomey). From the collection of the Segy Gallery, New York City.

Basic tool of Western psychiatry

Thorazine®
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Tablets: 25 and 50 mg of the HCl

- 'Thorazine' controls psychotic symptoms
- Especially useful in agitated, violent or anxious schizophrenic patients
- Unsurpassed clinical experience
- 18 convenient dosage forms and strengths

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of manifestations of psychotic disorders. For control of the manifestations of manic-depressive illness (manic phase).

Probably effective: For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasia, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery) especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudo-parkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema.

NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg., in bottles of 100; in Single Unit Packages of 100 (intended for institutional use only). Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg., in bottles of 50; in Single Unit Packages of 100 (intended for institutional use only). Injection, 25 mg./ml.; Syrup, 10 mg./5 ml.; Suppositories, 25 mg. and 100 mg.; Concentrate (intended for institutional use only), 30 mg./ml. and 100 mg./ml.

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Brief Summary

Indications: Norpramin (desipramine hydrochloride tablets N.F.) is indicated for the relief of depressive symptoms. Endogenous depressions are more likely to be alleviated than others.

Contraindications: Desipramine hydrochloride should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Contraindications include the acute recovery period following myocardial infarction and hypersensitivity to the drug. Cross sensitivity with other dibenzazepines is a possibility.

Warnings: 1. Extreme caution should be used in patients: (a) with cardiovascular disease. (b) with a history of urinary retention or glaucoma. (c) with thyroid disease or those on thyroid medication. (d) with a history of seizure disorder. 2. This drug is capable of blocking the antihypertensive effect of guanethidine and similarly acting compounds. 3. *Use in Pregnancy:* Safe use during pregnancy and lactation has not been established. 4. *Use in Children:* Norpramin is not recommended for use in children. 5. This drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. Therefore, the patient should be cautioned accordingly.

Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. If possible, dispense in child-resistant containers. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Use cautiously with anticholinergic or sympathomimetic drugs. Response to alcoholic beverages may be exaggerated. In the concurrent administration of ECT and antidepressant drugs one should consider the possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have been observed during surgery in patients on desipramine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy: the drug should be discontinued if there is neutropenia.

Adverse Reactions: *Cardiovascular:* hypotension, hypertension, tachycardia, palpitation, arrhythmias, heart block, myocardial infarction, stroke. *Psychiatric:* confusional states (especially in the elderly), hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis. *Neurological:* numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns; tinnitus. *Anticholinergic:* dry mouth, and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, hypotonic bladder. *Allergic:* skin rash, petechiae, urticaria, itching, photosensitization, edema (of face and tongue or general), drug fever, cross sensitivity with other tricyclic drugs. *Hematologic:* bone marrow depressions including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia, breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss, perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: *The usual adult dose:* 50 mg. three times daily; increase if necessary after 7 to 10 days to maximum of 200 mg. daily. Dosages above 200 mg. per day are not recommended. *Maintenance:* At a lower dose adequate to maintain remission. *Adolescent and geriatric patient dose:* 25 to 50 mg. daily; increase to 100 mg. daily if necessary.

Overdosage: There is no specific antidote for desipramine, nor are there specific phenomena of diagnostic value characterizing poisoning by the drug. The principles of management of coma and shock by means of the mechanical respirator, cardiac pacemaker, monitoring of central venous pressure and regulation of fluid and acid-base balance are well known in most medical centers. If heart failure is imminent, digitalize promptly.

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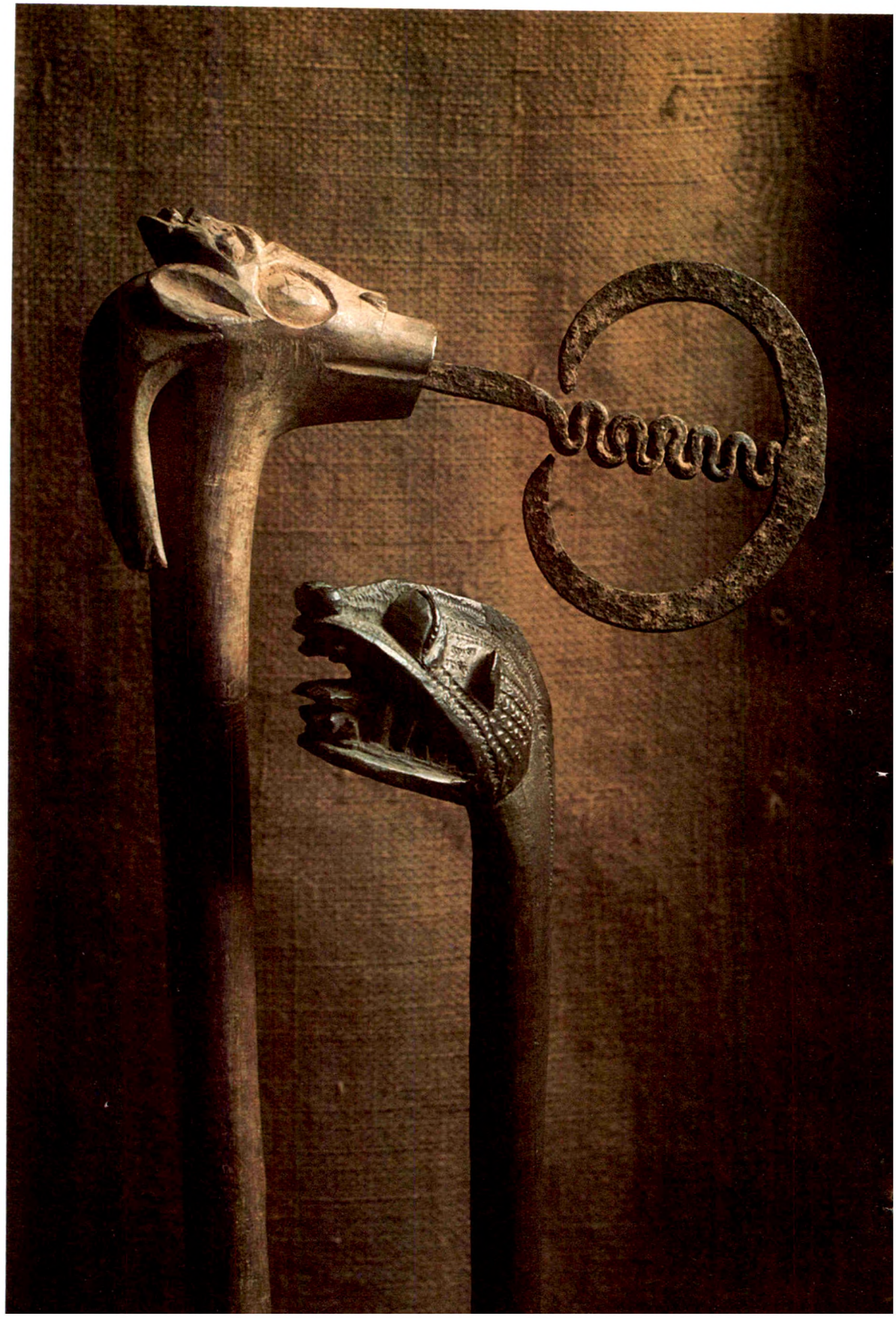
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Overview: Psychiatric Sequelae to Multiple Trauma by Nathan Schnaper and R Adams Cowley



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Basic tools of primitive psychiatry



Mankpo: Sceptres or staffs used by the Heviosso (lightning God) cult in medical ceremonies among the Ewe of Tongo and Fon of Dahomey. *Right,* staff with leopard's head, bared teeth and tongue (Ewe, Togo). *Left,* staff with ram's head—the sacred animal of the Heviosso—in the form of a serpent symbolizing the fire-spitting rainbow God of healing (Fon, Dahomey). From the collection of the Segy Gallery, New York City.

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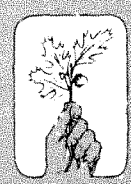
The San Marcos Treatment Center — a facility with three campuses designed for individuals with psychiatric, neurological, and intellectual difficulties who have evidenced a need for a 24-hour therapeutic milieu.

The Center offers a broad spectrum of services to both mentally retarded individuals and those with psychiatric disorders. In addition to a structured therapeutic environment, individual and group psychotherapy services are available to each resident. Clinical supervision and support services are provided by the Center psychiatrists.

The Ranch Treatment Center — located in the suburbs of Austin the Center provides both long-term and intermediate tenure services to multi-handicapped male adolescents and adults whose primary diagnostic classifications are in areas of mental retardation and mental illness. All residents receive program services which may permit their early discharge to the less restrictive settings of community-based programs.

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James L. Boynton, M.D./Director, The Oaks Residential Treatment Center
John L. Carrick, M.D./Staff Psychiatrist
Orrie L. Forbis, Jr., M.D./Staff Psychiatrist
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The September 1976 issue of

The American Journal of Psychiatry

will feature

- Overview: Research on the Psychology of Women. I. Sexual and Reproductive Life by Anne M. Seiden

Put depression to rest

The h.s. schedule: provides symptomatic relief throughout the next day.

Because of its pharmacokinetic characteristics, Endep (amitriptyline HCl) Roche, provides the same clinical effect over a period of time when given as a single daily *h.s.* dose or as 1/3 the same dose given *t.i.d.*

The h.s. schedule: helps put side effects in their place.

100 mg Endep *h.s.* can provide relief of depression-induced insomnia. Once asleep, the patients are also less likely to notice anticholinergic side effects—such as dry mouth—which reach a peak hours after the *h.s.* dose.



Midnight

Because the sedative effect may impair patients' performance during daytime, warn patients not to drive or operate dangerous machinery until the sedative potential has been clearly established.

The h.s. schedule: helps maximize patient compliance.

According to one investigation, only 40% of patients comply with a *t.i.d* drug schedule whereas 93% of patients comply with a one-dose-a-day schedule.[1] An *h.s.* schedule of Endep (amitriptyline HCl), therefore, should help you maximize patient compliance which, in turn, helps ensure prompt recovery.

ROCHE

all day long

The 100-mg strength: early signs of progress.

Many depressed patients with insomnia and anorexia begin to show improvement during the first week of Endep (amitriptyline HCl) therapy. Patients with symptoms of "neurotic" depression usually improve during the first week, whereas those with "psychotic" depression usually do not improve until the third week of therapy. However, adequate response may require up to 30 days in both types.



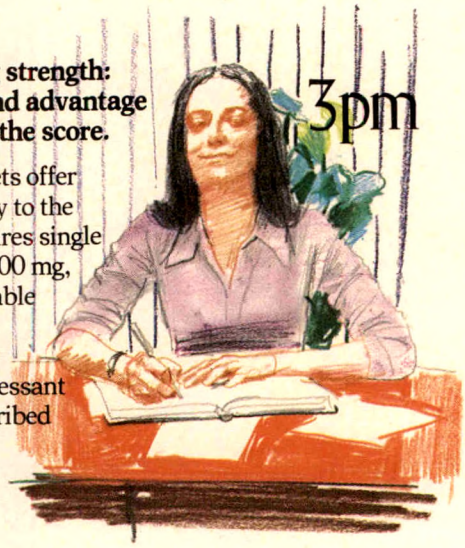
8am



Noon

The 100-mg strength: the economy and advantage of knowing the score.

100-mg tablets offer potential economy to the patient who requires single doses of 50 mg, 100 mg, or 150 mg. Available as scored tablets, Endep is the only tricyclic antidepressant that can be prescribed in half doses.



3pm

The 100-mg strength: emphasis on individualization of dosage.

The introduction of the 100-mg scored tablet brings to 5 the number of Endep dosage strengths now available as scored tablets: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg.

1. Ayd FJ, Jr. (Ed): *Int Drug Ther Newslett* 7:35-50, Sept 10, 1972

2. Haskell DS, *et al:* Rapidity of Symptom Reduction in Depressions Treated with Amitriptyline. *J Nerv Ment Dis 160:* 24-33, 1975



7pm

with new 100mg Endep®



amitriptyline HCl/Roche

Before prescribing, please consult complete product information, a summary of which appears on the following page.

Endep®

amitriptyline HCl/Roche



10 mg 25 mg 50 mg 75 mg Just released 100 mg

The only tricyclic antidepressant with scored tablets

- By relieving underlying depression Endep (amitriptyline HCl), in responsive patients, lifts mood and relieves symptoms such as anorexia, loss of interest, inability to concentrate, decreased libido or GI disturbances, often within three or four weeks after starting therapy.
- Endep usually relieves accompanying sleep disturbances, particularly early in the treatment regimen.
- All five dosage strengths are scored for greater flexibility and convenience in titration.
- The *h.s.* dosage minimizes skipped doses, maximizes patient acceptance and compliance.
- Specifying Endep assures quality plus potential economy.

Important Considerations

Should not be given concomitantly with an MAO inhibitor or within 2 weeks of its administration.

Patients should use caution in the performance of hazardous tasks such as operating machinery or driving a motor vehicle.

May enhance the effects of alcohol, barbiturates and other CNS depressants.

Not recommended for use during the acute recovery phase following myocardial infarction.

Patients with suicidal tendencies should not have easy access to large quantities of the drug.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: To relieve symptoms of depression (notably endogenous depressions) and depression accompanied by anxiety.

Contraindications: Known hypersensitivity. Do not use with monoamine oxidase (MAO) inhibitors or within at least 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Use not recommended during acute recovery phase after myocardial infarction.

Warnings: May block action of guanethidine or similar antihypertensives. Use with caution in patients with history of seizures, urinary retention, angle closure glaucoma, increased intraocular pressure. Closely supervise cardiovascular patients, hyperthyroid patients and those receiving thyroid medications. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, including amitriptyline HCl, especially in high doses. Myocardial infarction and stroke reported with use of this class of drugs.) May impair alertness; warn against hazardous occupations or driving a motor vehicle during therapy. Weigh possible benefits against hazards during pregnancy, the nursing period and in women of childbearing potential. Not recommended in children under 12.

Precautions: May exaggerate symptoms in schizophrenic and paranoid patients, or shift manic-depressives to manic stage; reduce dose or administer major tranquilizer concomitantly. Close supervision and careful dose adjustments required when given with anticholinergic or sympathomimetic agents. Exercise care in patients receiving large doses of ethchlorvynol; transient delirium reported with concomitant administration. May enhance effects of alcohol, barbiturates and other CNS depressants. Because of the possibility of suicide in depressed patients, do not permit easy access to large drug quantities in these patients. Because it may increase hazards of electroshock therapy, limit concomitant use to essential treatment. If possible, discontinue drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: Note: This list includes a few adverse reactions not reported with this specific drug but requiring consideration because of similarities of tricyclic antidepressants. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache and malaise. These are not indicative of addiction.

Dosage: Initiate at low levels; increase gradually, watching for signs of intolerance. As long as 30 days may elapse before adequate antidepressant effect develops; sedative effect may be noted earlier.

Initial Adult Dosage: Outpatients—25 mg *t.i.d.*; may be increased to 150 mg/day. Add increased drug to afternoon and/or bedtime doses. Alternate—50 to 100 mg *h.s.*, gradually increasing *h.s.* dose up to 150 mg/day. Hospitalized Patients—Up to 100 mg/day; increase gradually to 200 mg if necessary. A few patients may require 300 mg/day.

Adolescent and Elderly Patients: In general, 10 mg *t.i.d.* with 20 mg *h.s.* may be satisfactory for those who do not tolerate higher doses.

Maintenance Dosage: With symptomatic improvement, reduce dosage to lowest amount that gives relief, usually 25 mg *b.i.d.* to *q.i.d.*, or 10 mg *q.i.d.* Continue maintenance therapy 3 months or longer to avoid relapse.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestations and treatment.

Supplied: 10-mg, 25-mg, 50-mg, 75-mg and 100-mg scored tablets—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 60 (10 mg, 25 mg and 50 mg) or 30 (75 mg and 100 mg), available singly and in trays of 10.

ROCHE

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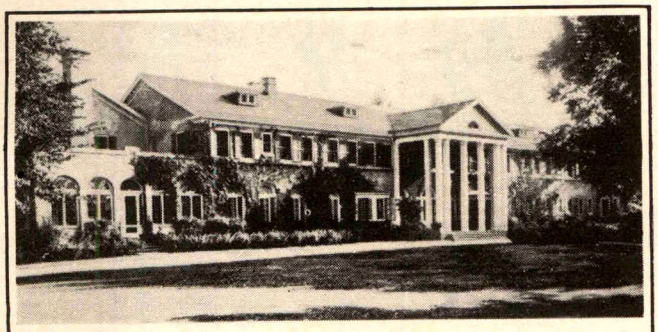
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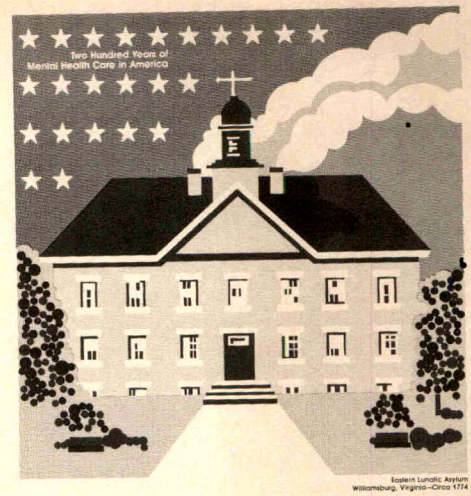
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July 1976

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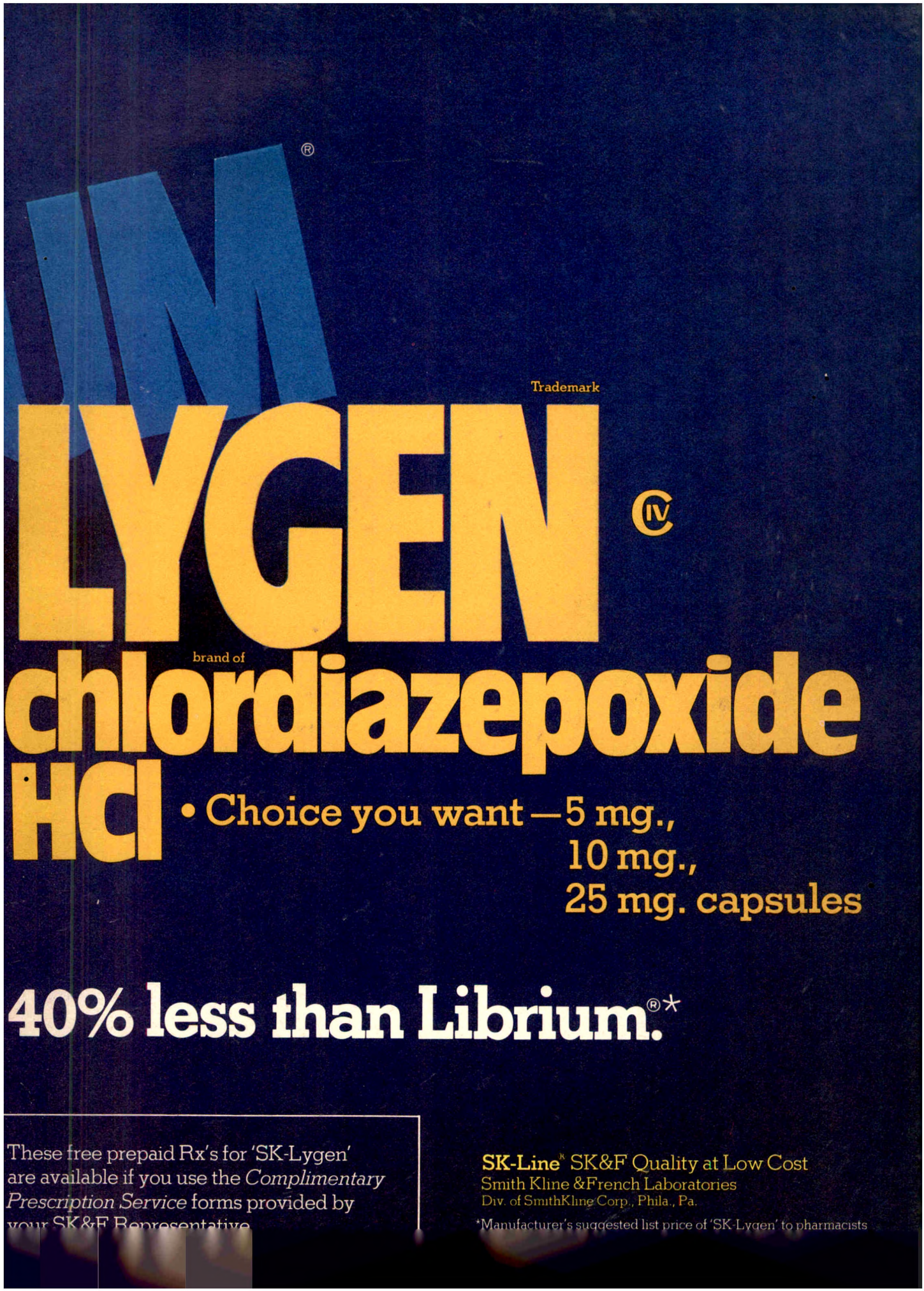
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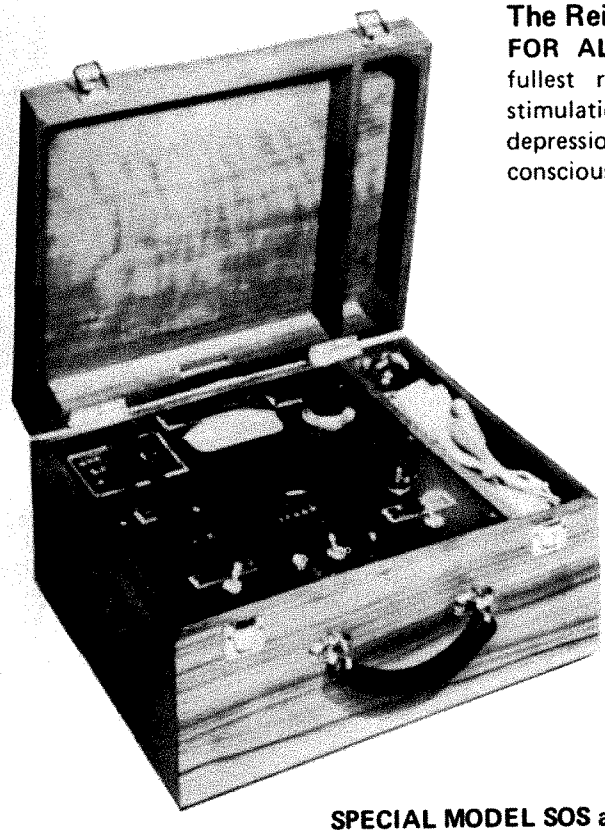
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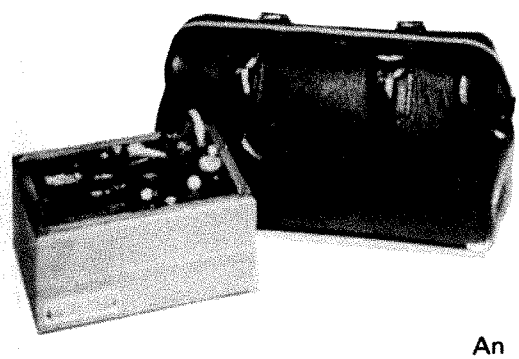
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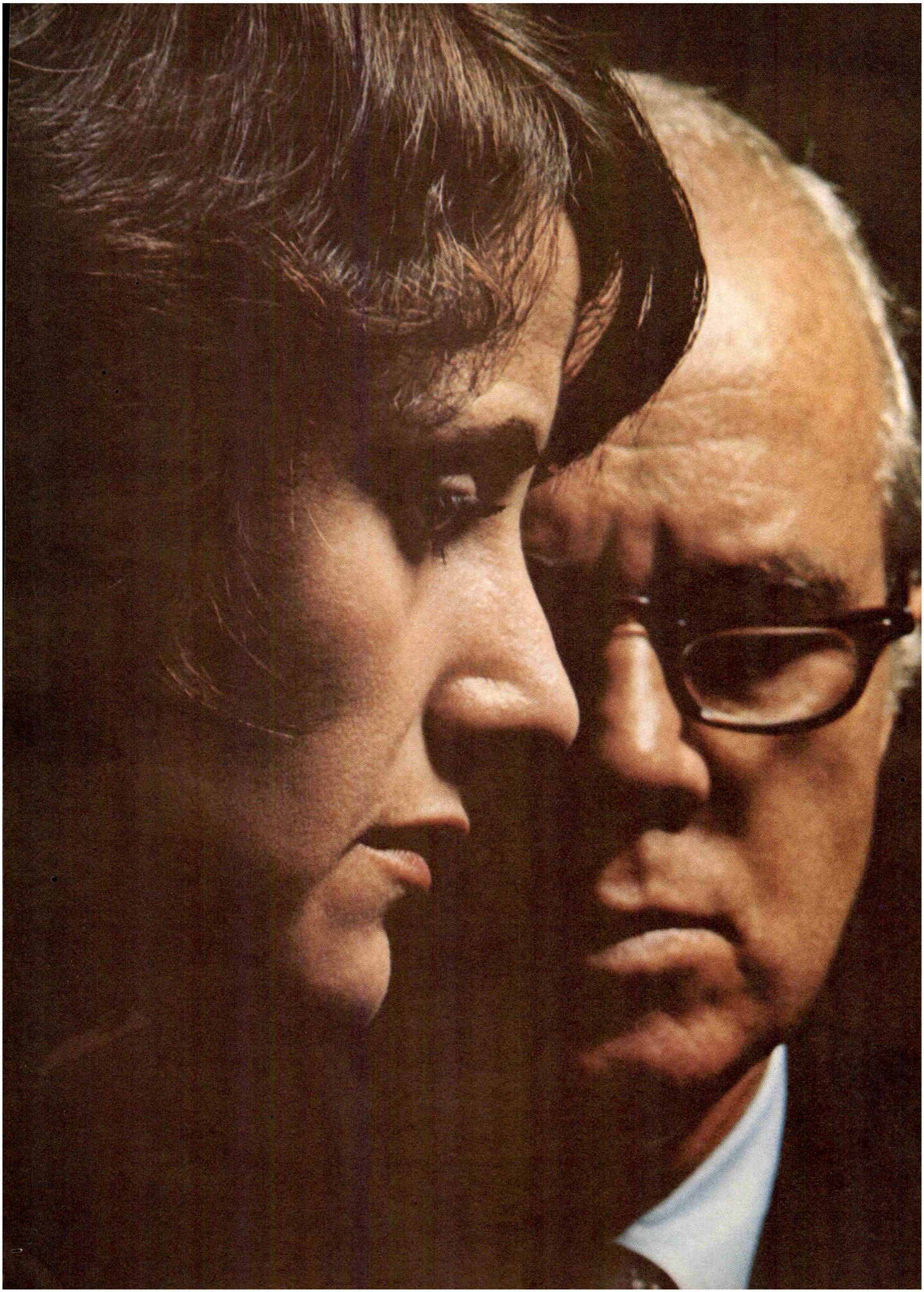
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There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

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TRIAVIL is contraindicated in CNS depression from drugs; in the presence of evidence of bone marrow depression; and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to other drugs or mask other disorders. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

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For a brief summary of prescribing information, please turn to the following page.

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CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia), liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension, hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors, seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

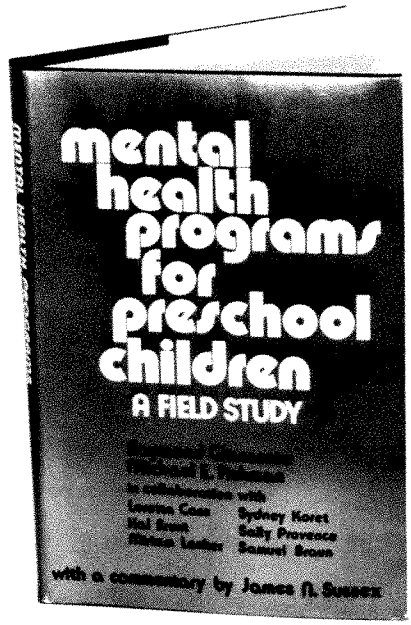
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MSD
MERCK SHARP

A Timely New Book from The Joint Information Service

This latest Joint Information Service field study provides a concise, comprehensive overview of the complex matter of the very young American child and his mental health, and then describes in intimate detail seven unique programs for pre-school children with problems—from North Hollywood's Dubnoff Center, emphasizing education as its primary therapeutic modality, to Baltimore's Martin Luther King, Jr. Parent-Child Center, serving two housing projects, served by Johns Hopkins, and largely governed by its own people. All different in treatment approach and philosophy, the programs described are uniform in their dedication to innovation in improving service to the emotionally disturbed very young child, and, equally, to the emotional well being of all young children.

This thoughtful and perceptive description of what has been created by some of the best informed, most experienced and thoughtful specialists in mental health services for very young children should be welcome to all involved in the mental health of children and a casebook for those dealing with child and family mental health.



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An articulate exposition of the immense problems and encouraging accomplishments in a particularly difficult area of endeavor . . . . Beyond their concern with the manifestly ill child, the authors intriguingly explore what may be needed to enhance the mental good health of all young children . . . . A significant contribution.

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President, American Association of Psychiatric Services for Children

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NEW ORAL CONCENTRATE

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LOXAPINE HYDROCHLORIDE

Lederle

25 mg base/ml* In bottles of 4 fl. oz.

Effectiveness – the only clue that it's there

DESCRIPTION

*Each ml contains the equivalent of 25 mg loxapine base as the HCl.

LOXITANE *loxapine*, a dibenzoxazepine compound represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f][1,4]oxazepine. It is present in the oral concentrate primarily as the HCl.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1 1/2 to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE C *loxapine hydrochloride* is indicated for the manifestations of schizophrenia.

LOXITANE has not been shown effective in the management of behavioral complications in patients with mental retardation.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

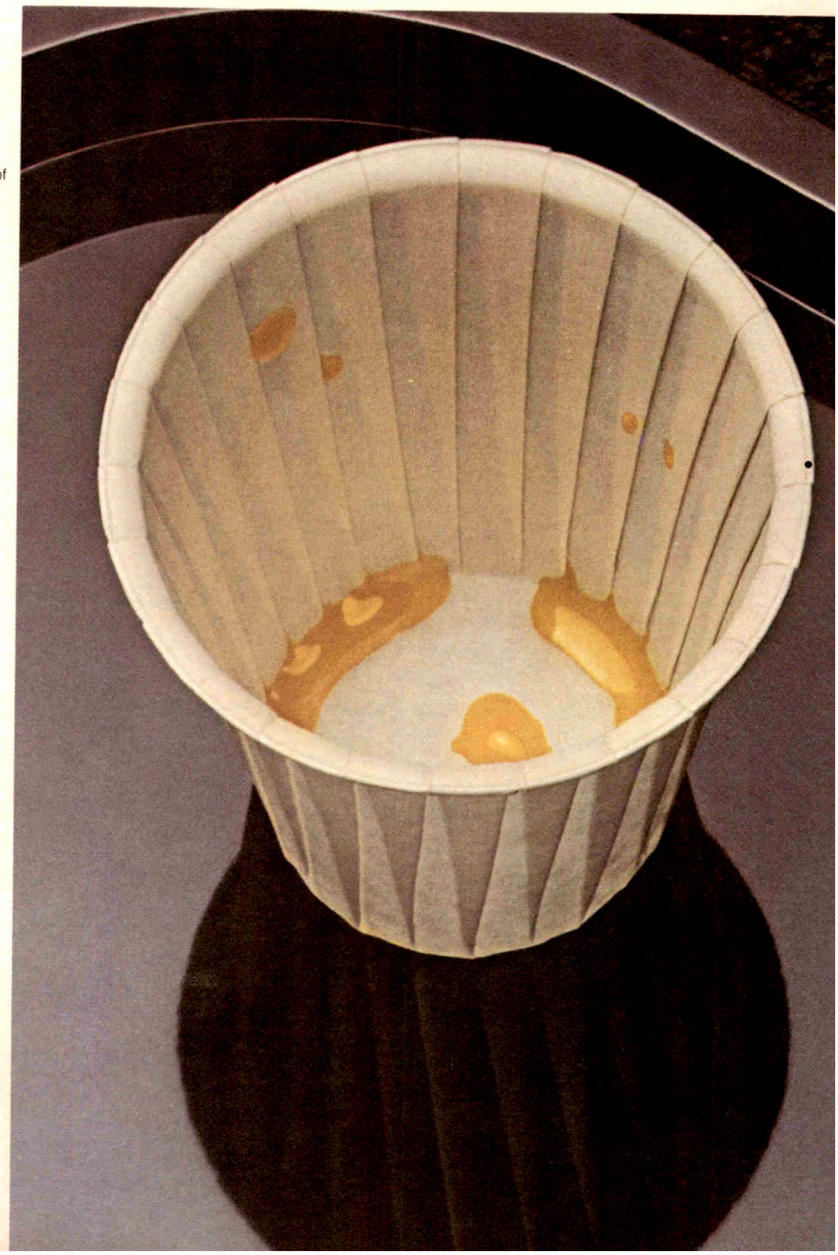
Usage in Pregnancy: Safe use of LOXITANE C *loxapine hydrochloride* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE C *loxapine hydrochloride*, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (e g, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.



Tasteless in orange, grapefruit and pineapple juices

Highly acceptable to patients who prefer medication in fruit juices, and a logical alternative to tablets or capsules when good patient management depends on uninterrupted treatment. LOXITANE C Oral Concentrate is as easy to take as the fruit juice in which it may be administered.

Same efficacy as LOXITANE Capsules

Efficacy that speaks for itself with substantial reduction in the symptoms of schizophrenia.

Same favorable side effects profile as with LOXITANE Capsules[1]

In 31 studies involving 469 schizophrenic patients, certain favorable trends were exhibited in the LOXITANE side effects profile; these require further tests and broader clinical experience for confirmation.[1]

Same daily dosage schedule as with LOXITANE Capsules

The dropper is calibrated to conform to usual dosage requirements.



Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects: Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE C *loxapine hydrochloride* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

DOSAGE AND ADMINISTRATION

LOXITANE C *loxapine hydrochloride* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

LOXITANE C Oral Concentrate should be mixed with orange or grapefruit juice shortly before administration.

Use only the enclosed calibrated (10 mg, 15 mg, 20 mg, 25 mg) dropper for dosage.

HOW SUPPLIED

LOXITANE C *loxapine hydrochloride* is supplied in bottles of 4 fl. oz. (120 ml) with calibrated dropper. Each ml contains the equivalent of 25 mg loxapine base as the HCl. Rev 4/76

Because schizophrenia is symptoms

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A Division of American Cyanamid Company
Pearl River, New York 10965

795-6

1. See LOXITANE C package insert for detailed information concerning side effects, contraindications, warnings and precautions.

The familiar refrain of depression: morning fatigue... sadness... anorexia... insomnia

Now, Merrell offers Norpramin (desipramine hydrochloride tablets N.F.) to effectively relieve these common manifestations of depression.

Norpramin also provides additional benefits in treatment of your patients.

- ☐ effectively relieves physical, psychological and emotional symptoms of depression
- ☐ minimal daytime sedation — important for patients who must be alert to perform daytime activities
- ☐ relief that may begin in 2 to 5 days — but full therapeutic effect is seldom seen before 2 weeks
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- ☐ increases interpersonal responsiveness
- ☐ can help facilitate psychotherapy

Prescribe Norpramin to change the familiar refrain of depression in your practice.

Norpramin®
(desipramine hydrochloride tablets N.F.)

Brief Summary
Indications: Norpramin (desipramine hydrochloride tablets N.F.) is indicated for the relief of depressive symptoms. Endogenous depressions are more likely to be alleviated than others.
Contraindications: Desipramine hydrochloride should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Contraindications include the acute recovery period following myocardial infarction and hypersensitivity to the drug. Cross sensitivity with other dibenzazepines is a possibility.
Warnings: 1. Extreme caution should be used in patients: (a) with cardiovascular disease. (b) with a history of urinary retention or glaucoma. (c) with thyroid disease or those on thyroid medication. (d) with a history of seizure disorder. 2. This drug is capable of blocking the antihypertensive effect of guanethidine and similarly acting compounds. 3. *Use in Pregnancy:* Safe use during pregnancy and lactation has not been established. 4. *Use in Children:* Norpramin is not recommended for use in children. 5. This drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. Therefore, the patient should be cautioned accordingly.
Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. If possible, dispense in child-resistant containers. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Use cautiously with anticholinergic or sympathomimetic drugs. Response to alcoholic beverages may be exaggerated. In the concurrent administration of ECT and antidepressant drugs one should consider the possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have been observed during surgery in patients on desipramine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy: the drug should be discontinued if there is neutropenia.
Adverse Reactions: *Cardiovascular:* hypotension, hypertension, tachycardia, palpitation, arrhythmias, heart block, myocardial infarction, stroke. *Psychiatric:* confusional states (especially in the elderly), hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis. *Neurological:* numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns; tinnitus. *Anticholinergic:* dry mouth, and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, hypotonic bladder. *Allergic:* skin rash, petechiae, urticaria, itching, photosensitization, edema (of face and tongue or general), drug fever, cross sensitivity with other tricyclic drugs. *Hematologic:* bone marrow depressions including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia, breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss, perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.
Dosage and Administration: *The usual adult dose:* 50 mg. three times daily; increase if necessary after 7 to 10 days to maximum of 200 mg. daily. Dosages above 200 mg. per day are not recommended. *Maintenance:* At a lower dose adequate to maintain remission. *Adolescent and geriatric patient dose:* 25 to 50 mg. daily; increase to 100 mg. daily if necessary.
Overdosage: There is no specific antidote for desipramine, nor are there specific phenomena of diagnostic value characterizing poisoning by the drug. The principles of management of coma and shock by means of the mechanical respirator, cardiac pacemaker, monitoring of central venous pressure and regulation of fluid and acid-base balance are well known in most medical centers. If heart failure is imminent, digitalize promptly.

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Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

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Norpramin®
(desipramine hydrochloride)

25 mg., 50 mg. tablets

lightens and brightens
the days of your
depressed patients

Merrell

The schools don't like to get involved with medication for MBI –and now they don't have to



Importance of Cylert (pemoline) single daily dosage to the child, the parents and the teacher

For the child		For the adults
No drug in child's possession while at school	⟷	Control of medication remains with parents
Avoids situation in which child is repeatedly singled out as being "different"	⟷	Obviates need for teacher or nurse to supervise taking of mid-day doses
Helps prevent possible variations in effect caused by missed, forgotten or delayed doses	⟷	Helps assure that the prescribed dosage is being given each day

Cylert offers these benefits in a treatment program for MBD

- Single daily dose administration
- Minimal cardiovascular effects
- Mean dosage in long-term studies remained remarkably constant
- Can be taken with breakfast

Cylert® (pemoline) CIV

dosage is once-a-day, given to the child at home by the parent



Cylert, alone among CNS stimulants used to treat MBD, is inherently long-acting, permitting once-daily dosage

Dosage and administration

Cylert is given as a single oral dose each morning.

The recommended starting dose is 37.5 mg. per day. This daily dosage should be gradually increased at one-week intervals using increments of 18.75 mg. until the desired clinical response is obtained.

The mean daily effective dose ranges from 56.25 to 75 mg. per day. The maximum recommended daily dose of Cylert is 112.5 mg.

Using the recommended schedule of dose titration, significant benefits may not be seen until the third or fourth week of drug therapy. Side effects may be seen prior to optimum clinical results.

When not to use Cylert

Cylert should not be used for (and will not be effective in) simple cases of overactivity in school age children.

Neither should it be used in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis.

The physician should rely on a complete history of the child and a thorough description of symptoms from both parents and teacher before postulating a diagnosis of MBD.

Please see next page for Prescribing Information

6083144

Cylert®
(pemoline) CIV

Prescribing Information

Description: Cylert (pemoline) is a white, tasteless, odorless powder which is relatively insoluble (less than 1 mg/ml) in water, chloroform, ether, acetone, and benzene. In 95% ethyl alcohol, the solubility of pemoline is 2.2 mg/ml.

Actions: Cylert (pemoline) is a central nervous system stimulant. The pharmacologic activity of pemoline is similar to that of other known stimulants but with minimal sympathomimetic effects. Pemoline is structurally dissimilar from the amphetamines and methylphenidate. Although the exact mode of pharmacodynamic action is undetermined in man, pemoline has been reported to increase the rate of synthesis of dopamine in rat brain.

In human subjects, Cylert produces peak blood levels within 2-4 hours. The serum half-life is approximately 12 hours. Multiple dose studies in adults at several dose levels indicate that serum levels plateau in approximately three days. Cylert and its metabolites are primarily excreted by the kidneys with approximately 75% of an oral dose appearing in the urine within a 24-hour period. Approximately 43% of pemoline is excreted unchanged. Metabolites include pemoline dione, conjugated pemoline and mandelic acid.

Cylert (pemoline) has a gradual onset of action in children with minimal brain dysfunction. Using the recommended schedule of dosage titration, significant clinical benefit may not be evident until the third or fourth week of drug administration.

Indications: MINIMAL BRAIN DYSFUNCTION IN CHILDREN—as adjunctive therapy to other remedial measures (psychological, educational, social).

Special Diagnostic Considerations:

Specific etiology of minimal brain dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis includes the use not only of medical but of psychological, educational, and social resources.

Characteristics commonly reported include: A chronic history of moderate to severe hyperactivity, short attention span, distractibility, emotional lability, and impulsivity. Nonlocalizing (soft) neurological signs, learning disability, and abnormal EEG may or may not be present. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. In the primary therapy of MBD, appropriate educational placement is essential and psychosocial intervention is generally necessary. When these measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis.

Contraindication: Cylert (pemoline) is contraindicated in patients with known hypersensitivity or idiosyncrasy to the drug. (See PRECAUTIONS)

Warnings: Cylert is not recommended for children under six years of age since safety and efficacy in this age group have not yet been established.

Since Cylert (pemoline) and its metabolites are excreted primarily by the kidneys, caution should be observed in administering the drug to children with significantly impaired renal function.

Sufficient data on safety and efficacy of Cylert administration for periods beyond two years duration in children with minimal brain dysfunction are not yet available. Although a definite causal relationship has not been established, some temporary suppression of predicted growth pattern(i.e., weight and/or height) has been reported with the long-term use of stimulants in children. Therefore, patients requiring long-term therapy should be carefully monitored.

Drug Interactions: Interactions between Cylert and other drugs have not been studied in humans. As with most other drugs, concurrent administration with other agents, especially drugs with central nervous system activity, should be carefully monitored.

Usage in Pregnancy: Safety for use in pregnancy has not been established. Standard studies of fertility, teratology and reproduction were conducted in rats and rabbits. Daily oral doses of pemoline of 18.75 and 37.5 mg/kg beginning at conception produced no abnormalities in the fetuses and did not affect viability at birth. Further studies using similar dose levels with drug administration beginning 14 days before conception demonstrated an increased incidence of stillbirths in these animals.

Drug Dependence: Studies of the drug abuse potential of Cylert (pemoline) in primates have not demonstrated a potential for self-administration. However, the pharmacologic similarities between Cylert and other CNS stimulants with known abuse liability suggest that drug dependence of the stimulant type might occur. There have been isolated reports of transient psychotic symptoms in adults following long-term misuse of pemoline taken orally in excessive quantities. Therefore, caution should be observed in emotionally unstable patients considered to have a psychological potential for drug dependence.

Precautions: Delayed hypersensitivity reactions involving the liver have been reported in 1-2% of the patients receiving Cylert usually after several months of therapy. No clinical symptomatology has been observed, but mild to moderate increases in transaminase (SGOT and SGPT) levels have occurred in these cases. These effects appear to be completely reversible when drug treatment is discontinued. Transaminase levels should be determined periodically during therapy with Cylert to detect any such reactions.

Adverse Reactions: The most frequently reported adverse reaction with Cylert is insomnia. Insomnia has been observed prior to optimum therapeutic response and in the majority of cases was transient in nature or responded to dosage reduction. Anorexia with weight loss during the first few weeks of therapy has also been reported. With continuing therapy, a return to a normal weight curve usually occurred within three to six months. Other adverse reactions reported include stomachache, skin rash, irritability, mild depression, nausea, dizziness, headache, drowsiness, and hallucinations. Mild adverse reactions appearing early in treatment often remit with continuing therapy. If adverse reactions are of a significant or protracted nature, dosage reduction or discontinuation should be considered.

Dosage and Administration: Cylert (pemoline) is administered as a single oral dose each morning. The recommended starting dose is 37.5 mg per day. This daily dosage should be gradually increased at one week intervals using increments of 18.75 mg until the desired clinical response is obtained. The mean daily effective dose ranges from 56.25 to 75 mg per day. The maximum recommended daily dose of pemoline is 112.5 mg.

Clinical improvement with Cylert is gradual. Using the recommended schedule of dosage titration, significant benefit may not be evident until the third or fourth week of drug administration. Drug administration should be interrupted occasionally to determine if behavioral symptoms sufficient to require continuing therapy recur.

Overdosage: Cylert overdosage has been reported to produce symptoms of tachycardia, hallucinations, agitation, or restlessness. The treatment of acute massive overdosage with pemoline is essentially the same as that for overdosage with any drug having CNS stimulatory effects. Management is largely symptomatic and may include induction of emesis, gastric lavage or other measures as appropriate.

How Supplied: Cylert (pemoline) is supplied as monogrammed, grooved tablets in three dosage strengths:

18.75 mg. tablets (yellow-colored) in bottles of 100 (**NDC** 0074-6025-13)

37.5 mg. tablets (orange-colored) in bottles of 100 (**NDC** 0074-6057-13)

75 mg. tablets (tan-colored) in bottles of 100 (**NDC** 0074-6073-13)

6083144

ABBOTT

Schering

Out of touch



but not beyond reach...

Help restore reality

Trilafon®
brand of
perphenazine, NF

for management of disturbed behavior in schizophrenic and manic states

- low dose, high potency phenothiazine useful for inpatient and outpatient treatment
- helps orient psychiatric patients to their surroundings
- effective with minimal sedation, usually produces little lethargy or drowsiness

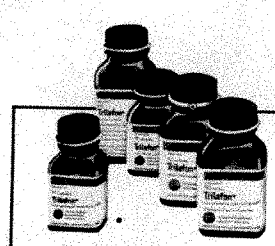
Versatile Dosage	
Injection	5 mg/ml, 1 ml ampul
Concentrate	16 mg/5 ml, 120 ml bottle
Tablets	2,4,8,16 mg
REPETABS® Tablets 8 mg brand of repeat-action tablets	

Please see next page for prescribing information.



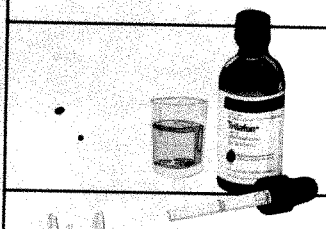
Trilafon®
brand of perphenazine, NF

For management of schizophrenic and manic disorders in psychiatric hospitals, mental health clinics, and with outpatient treatment



TABLETS
for maintenance or control of patients in hospital or home

BENEFITS
- generally improve cooperation and communication
- decrease need for custodial care, hasten discharge



CONCENTRATE
for maintenance or control of uncooperative in-hospital patients

- easily mixes with most liquids
- ensures easy, steady, certain administration



INJECTION
for emergency control of uncooperative in-hospital patients

- usually takes effect in 10 minutes
- average duration of effect is 6 hours

TRILAFON® Tablets
brand of perphenazine, NF
REPETABS® Tablets
Concentrate
Injection

CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON **Injection** should not be given to patients in coma or severely depressed states.

WARNINGS **Dosage in pregnancy:** Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenazine should be under medical supervision, particularly if they are receiving high doses. Patients who have had any severe reaction to phenothiazines or to imipramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patients treated with perphenazine, the possibility that they might occur with TRILAFON should be considered: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the visual fields; pigmentation of the retina, cornea, or lens; cerebral edema; polyphagia; photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but not epinephrine, because epinephrine's action is blocked and partly reversed by perphenazine. Severe, acute hypotension has occurred with the use of phenothiazines and is of particular concern in patients with mitral insufficiency or pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic reaction to perphenazine; treatment with perphenazine should be stopped if this occurs.

The antiemetic effect of perphenazine can obscure signs of toxicity due to overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor or intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefore, contact of hands or clothing by those handling perphenazine solutions should be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-system-depressant actions of opiates, antihistamines, barbiturates, and alcohol, less than the usual dosage of these agents is required when they are administered concomitantly with TRILAFON. Patients should be cautioned that their response to alcohol may be increased while they are being treated with TRILAFON.

Phenothiazines also potentiate the effects of atropine, heat, and phosphorus insecticides, and should be used with caution in persons exposed to these agents.

ADVERSE REACTIONS *Extrapyramidal reactions:* dystonia including protrusion, discoloration, aching and rounding of the tongue; tonic spasm of the masticatory muscles; tight feeling in the throat, slurred speech, dysphagia, oculogyric crisis, trismus, torticollis, retrocollis, muscle weakness, and aching and numbness of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism; hyperreflexia; and ataxia. The incidence and severity of these reactions usually increase with increased dosage, but have occurred in some patients receiving low dosage. Reduction in dosage or treatment with an antispasmodic agent will usually control extrapyramidal reactions. In some instances, however, these reactions may persist after discontinuation of treatment with perphenazine.

Persistent tardive dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities. There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine, vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

Side effects with intramuscular TRILAFON **Injection** have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON (perphenazine) **Injection** is a rare occurrence.

NOVEMBER 1972
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PHILOSOPHICAL DIMENSIONS OF PARAPSYCHOLOGY *edited by* **James M. O. Wheatley**, *Univ. of Toronto, Toronto, Canada, and* **Hoyt L. Edge**, *Rollins College, Winter Park, Florida. (22 Contributors)* Traditional philosophical issues are re-examined and novel problems arising from advances in the field are critically discussed. Divided into five sections, the readings range over such topics as the philosophical relevance of parapsychology; knowledge, memory and ESP; paranormal precognition; personal survival of bodily death; and the relationship between science and the paranormal. *'76, 520 pp., 3 il., $24.50*

CRISIS SERVICES FOR CAMPUS AND COMMUNITY: A Handbook for the Volunteer *by* **E. Robert Sinnett**, *Kansas State Univ., Manhattan. In collaboration with* **Cecil J. Killacky, Anthony P. Jurich, Marylyde Kornfeld, Orma Linford, Kathleen Keen Sinnett** *and* **Nancy Burnett**. *Foreword by* **Edward D. Greenwood**. Areas of key concern in dealing with youth and young adults are highlighted in this book including how to develop a helping relationship and assistance with emotional problems, suicidal tendencies, difficulties in dealing with sexuality, and drug abuse; how to aid in defense and advocacy; and how to make and handle referrals. *'76, 260 pp., 5 il., 12 tables, $12.50*

ACUTE GRIEF AND THE FUNERAL *edited by* **Vanderlyn R. Pine, Austin H. Kutscher, David Peretz, Robert C. Slater, Robert DeBellis, Robert J. Volk,** *and* **Daniel J. Cherico**. This volume comprehensively describes the psychological and social impact of bereavement during the period of acute grief, the time that encompasses those events immediately following the death of a significant and loved individual. Of particular interest are chapters on explaining death to children, the impact of social neglect on the elderly, and the roles of the funeral director, psychiatrist, educator and minister in giving counsel to the bereaved. *'76, 328 pp., 1 il., 26 tables, $16.50*

HOMINOLOGY: PSYCHIATRY'S NEWEST FRONTIER *by* **C. David Jones**, *Chicago Medical School, Chicago, Illinois.* This book details the fallacies inherent in both the absolute and relativistic version of moral values. It also presents a fascinating history of hominology and explains how a simplified form is being utilized with culturally different children to help them gain a sense of personal dignity and enhance their self-image. *'75, 216 pp., 15 il., 2 tables, $12.50*

MENTAL EXAMINER'S SOURCE BOOK *edited by* **Julian C. Davis**, *Florida State Hospital, Chattahoochee, and* **John P. Foreyt**, *Baylor College of Medicine, Houston, Texas. (11 Contributors)* Authoritative material is provided on both traditional mental evaluation instruments and recent topics in clinical assessment. Along with chapters on the classification of mental retardation, objective and projective personality testing, assessment of brain damage, intelligence testing and the mental status examination, there are chapters on the psychological evaluation of coronary heart disease, and pain and disability. *'75, 248 pp., 18 il. (5 in color), 37 tables, $14.50*

THE EVOLUTION AND CHEMISTRY OF AGGRESSION *by* **Delbert D. Thiessen**, *Univ. of Texas, Austin. Foreword by* **I. Newton Kugelmass**. While it is possible to investigate one facet independently of the other, the two, evolution and chemistry, are intimately intertwined and are best studied together. Emphasis is placed on understanding the biochemical processes underlying aggression. The author explores the phylogenetic history of aggression, outlines several genetic correlates of aggression, examines hormonal control, reviews the significance of chemosignals, and discusses brain biochemistry. *'76, 232 pp., 38 il., 27 tables, $18.50*

CASE STUDIES OF THE CLINICAL INTERPRETATION OF THE BENDER GESTALT TEST: Illustrations of the Interpretive Process for Graduate Training and Continuing Professional Education *by* **Clifford M. DeCato** *and* **Robert J. Wicks**, *both of Hahnemann Medical College and Hospital, Philadelphia, Pennsylvania. Foreword by* **Zygmunt A. Piotrowski**. The emphasis of this work is placed on illustrating a strategy by which a clinician can derive inferences from the Bender Gestalt Test to arrive at clinically useful formulations of personality development. The book features both child and adult cases, illustrations of the projective uses of BGT, and a substantive bibliography. *'76, 152 pp., 31 il., $9.75*

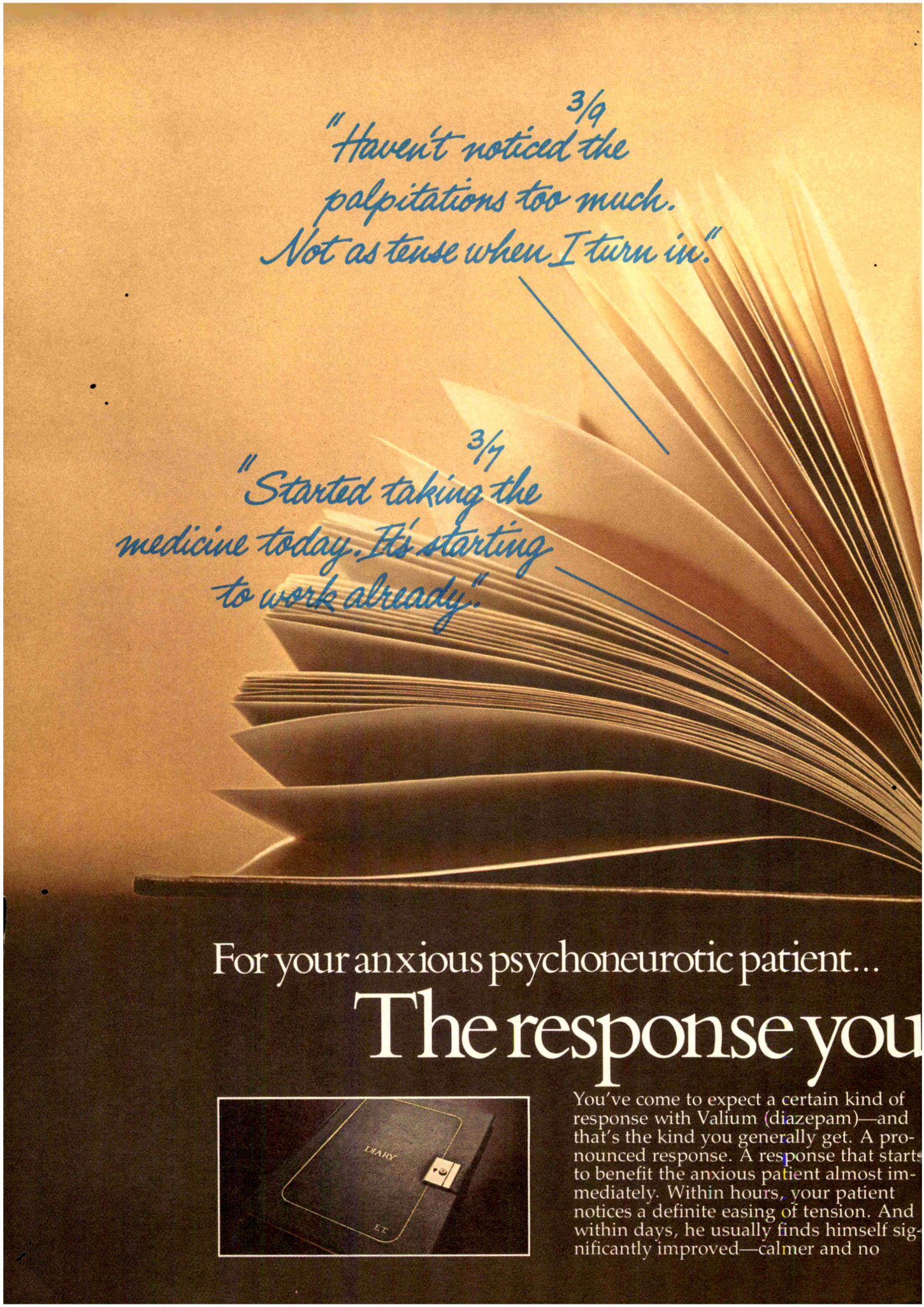
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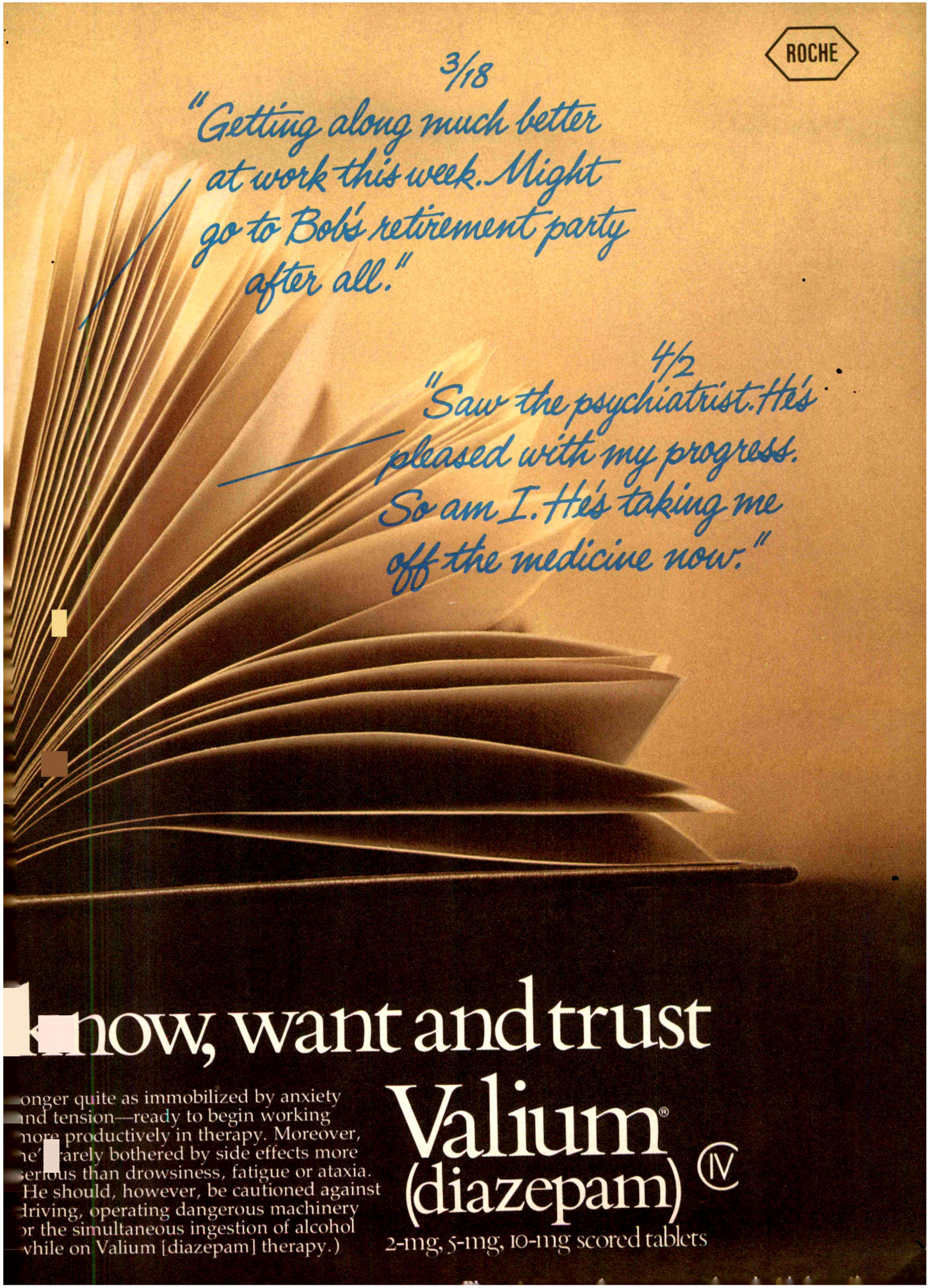
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For your anxious psychoneurotic patient...

The response you

You've come to expect a certain kind of response with Valium (diazepam)—and that's the kind you generally get. A pronounced response. A response that starts to benefit the anxious patient almost immediately. Within hours, your patient notices a definite easing of tension. And within days, he usually finds himself significantly improved—calmer and no


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onger quite as immobilized by anxiety
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erious than drowsiness, fatigue or ataxia.
He should, however, be cautioned against
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while on Valium [diazepam] therapy.)
Valium®
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Patient response you can depend on.

Valium® (diazepam)

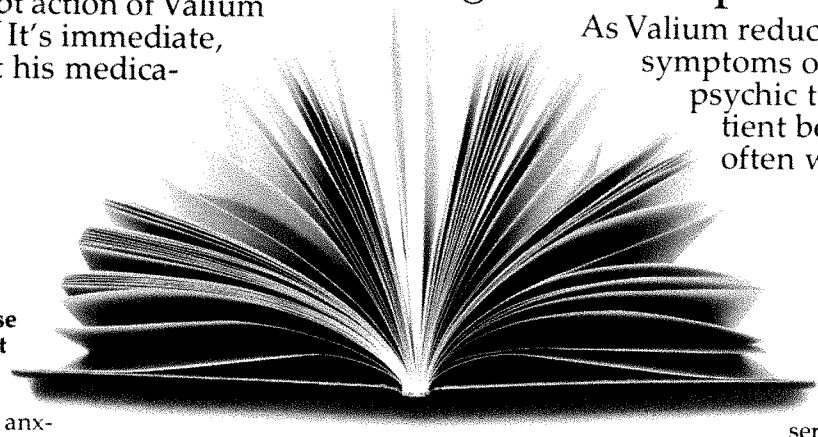
2-mg, 5-mg, 10-mg scored tablets

Initial calming in hours.

Your anxious psychoneurotic patient will find the prompt action of Valium highly reassuring. It's immediate, tangible proof that his medication is working.

Significant improvement in days

As Valium reduces overwhelming symptoms of anxiety and psychic tension, your patient begins to feel better often within a few days.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

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The vulnerable ages

The first epileptic seizure is most likely to occur during early childhood and at the onset of puberty

About 9 out of 10 epileptics experience their first seizure before the age of 20—with the highest incidence between 5 and 7, when children start school, and at the onset of puberty, a time of physiological and psychic turmoil.[1] The most common type, grand mal, occurs in approximately 75% of epileptic children,[1] and more than 50% of patients who suffer initially from petit mal develop grand mal seizures before they reach the age of 16.[2]

Mysoline (primidone) for control of grand mal, psychomotor and focal epilepsy

At the onset and afterwards — used alone or as concomitant therapy, MYSOLINE may reduce the frequency and severity of major motor seizures—or even eliminate them. *Excellent* for control of grand mal. Valuable for control of psychomotor[1,3,4] and focal epilepsy as well.[5]

Add Mysoline when control with other anticonvulsants is inadequate — As concomitant therapy, MYSOLINE can improve seizure control in grand mal and psychomotor epilepsy. The combined use of phenobarbital, diphenylhydantoin, and MYSOLINE may have additive anticonvulsant effects without additive side effects.[6]

Change to Mysoline when other anticonvulsants fail — A changeover to MYSOLINE is frequently warranted when other anticonvulsants must be discontinued because of important side effects, or when grand mal seizures are refractory to phenobarbital, with or without diphenylhydantoin.[7]

Ayerst®

Mysoline® (primidone)

Tablets 250 mg.
50 mg.
Suspension 250 mg./5 cc.

May be the start of a better life for the epileptic

See following page of advertisement for prescribing information.

7538

Mysoline® (primidone)

may be the start of a better life for the epileptic

initial and maintenance therapy for
grand mal, psychomotor and focal epilepsy

BRIEF SUMMARY
(For full prescribing information, see package circular.)

MYSOLINE® Brand of PRIMIDONE
Anticonvulsant

ACTIONS: MYSOLINE acts on the central nervous system to raise seizure threshold or alter seizure pattern. The mechanism(s) of action of anticonvulsant drugs is not known.

Primidone has anticonvulsant activity *per se*. In addition, its two metabolites possess anticonvulsant qualities. The major metabolite is phenylethylmalonamide (PEMA); the other is phenobarbital. In addition to its own anticonvulsant potential, PEMA potentiates phenobarbital.

INDICATIONS: MYSOLINE, either alone or used concomitantly with other anticonvulsants, is indicated in the control of grand mal, psychomotor, and focal epileptic seizures. It may control grand mal seizures refractory to other anticonvulsant therapy.

CONTRAINDICATIONS: Primidone is contraindicated in: 1) patients with porphyria and 2) patients who are hypersensitive to phenobarbital (see ACTIONS).

WARNINGS: The abrupt withdrawal of antiepileptic medication may precipitate status epilepticus.

The therapeutic efficacy of a dosage regimen takes several days before it can be assessed.

Use in pregnancy: Recent reports strongly suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Reference has been made to primidone in several cases in which it was used *in combination* with other anticonvulsants; but its teratogenicity has not been conclusively demonstrated. The possibility exists that other factors, *e.g.*, genetic factors or the epileptic condition, may contribute to the higher incidence of birth defects. The data also indicate that the great majority of mothers receiving anticonvulsant medication deliver normal infants.

Anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent major seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and risk to both mother and the unborn child.

When the nature, frequency, and severity of the seizures do not pose a clear threat to the patient, good medical practice requires that the physician weigh the expected therapeutic benefit of anticonvulsant therapy against possible risk on an individual basis.

Neonatal hemorrhage, with a coagulation defect resembling vitamin K deficiency, has been described in newborns whose mothers were taking primidone and other anticonvulsants. Pregnant women under anticonvulsant therapy should receive prophylactic vitamin K_1 therapy for one month prior to, and during, delivery.

The physician should weigh all of the foregoing considerations when treating and counseling epileptic women of childbearing potential.

PRECAUTIONS: The total daily dosage should not exceed 2 Gm. Since MYSOLINE therapy generally extends over prolonged periods, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

In nursing mothers: There is evidence that in mothers treated with primidone, the drug appears in the milk in substantial quantities. Since tests for the presence of primidone in biological fluids are too complex to be carried out in the average clinical laboratory, it is suggested that the presence of undue somnolence and drowsiness in nursing newborns of MYSOLINE-treated mothers be taken as an indication that nursing should be discontinued.

ADVERSE REACTIONS: The most frequently occurring early side effects are ataxia and vertigo. These tend to disappear with continued therapy, or with reduction of initial dosage. Occasionally, the following have been reported: nausea, anorexia, vomiting, fatigue, hyperirritability, emotional disturbances, sexual impotency, diplopia, nystagmus, drowsiness, and morbilliform skin eruptions. Occasionally, persistent or severe side effects may necessitate withdrawal of the drug. Megaloblastic anemia may occur as a rare idiosyncrasy to MYSOLINE and to other anticonvulsants. The anemia responds to folic acid, 15 mg. daily, without necessity of discontinui medication.

DOSAGE AND ADMINISTRATION: The avera adult dose is 0.75 to 1.5 Gm. per day. The initial dose is 250 r Increments of 250 mg. are added, usually at weekly interv to tolerance, or therapeutic effectiveness, up to daily doses n exceeding 2.0 Gm. A typical dosage schedule for the introd tion of MYSOLINE (primidone) is as follows:

Adults and Children Over 8 Years of Age

1st Week 250 mg. daily at bedtime	*2nd Week* 250 mg. b.i.d.
3rd Week 250 mg. t.i.d.	*4th Week* 250 mg. q.i.d.

In children under 8 years of age, maintenance levels are e tablished by a similar schedule, but at one-half the adult dosa It is best to begin with 125 mg., with gradual weekly increas of 125 mg. a day, to a daily total usually between 500 mg. ar 750 mg.

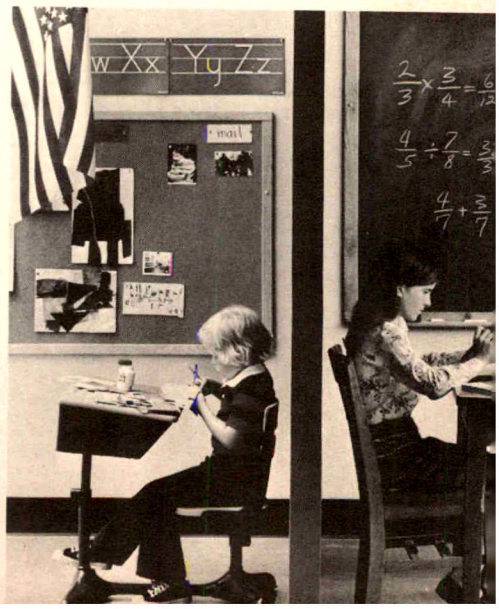
In patients already receiving other anticonvulsant MYSOLINE should be gradually increased as dosage of tl other drug(s) is maintained or gradually decreased. This re men should be continued until satisfactory dosage level achieved for combination, or the other medication is complete withdrawn. When therapy with this product alone the objective, the transition should not be completed in le than two weeks.

MYSOLINE 50 mg. Tablet can be used to practical advantag when small fractional adjustments (upward or downwar may be required, as in the following circumstances:

- for initiation of combination therapy
- during "transfer" therapy
- for added protection in periods of stress or stressful situ tions that are likely to precipitate seizures (menstruatio allergic episodes, holidays, etc.)

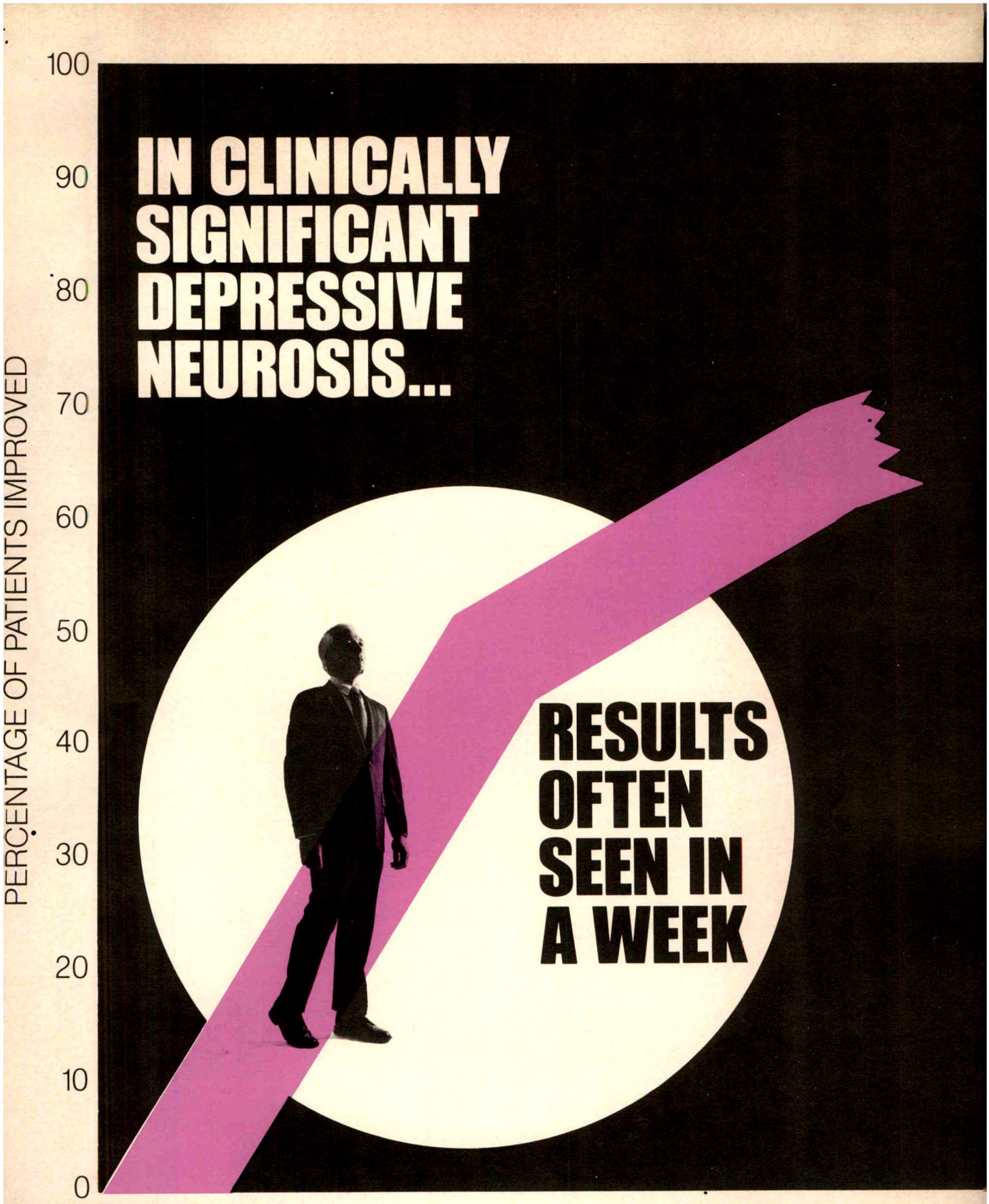
HOW SUPPLIED: MYSOLINE *Tablets*—No. 430—Eac tablet contains 250 mg. of primidone (scored), in bottles o 100 and 1,000. Also in unit dose package of 100. No. 431—Eac tablet contains 50 mg. of primidone (scored), in bottles of 10 and 500. MYSOLINE *Suspension*—No. 3850—Each 5 cc. (te spoonful) contains 250 mg. of primidone, in bottles of 8 fluic ounces.

References: 1. Livingston, S.: Comprehensive Managemen of Epilepsy in Infancy, Childhood and Adolescence, Springfiel Ill., Charles C Thomas, 1972, pp. 6, 7, 584. 2. Grossman, H.J. Ill. Med. J. *135*:260 (Mar.) 1969. 3. Scholl, M.L., in Conn H.F.: Current Therapy 1973, Philadelphia, Saunders, 197 pp. 675-7. 4. Metrick, S.: C.M.D. *37*:49 (Jan.) 1970. 5. Forste F.M.: Med. Clin. North Am. *47*:1579 (Nov.) 1970. 6. White P.T.: Wis. Med. J. 68:178 (Apr.) 1969. 7. Millichap, J.G. Drug Ther. *1*:15 (Oct.) 1971.



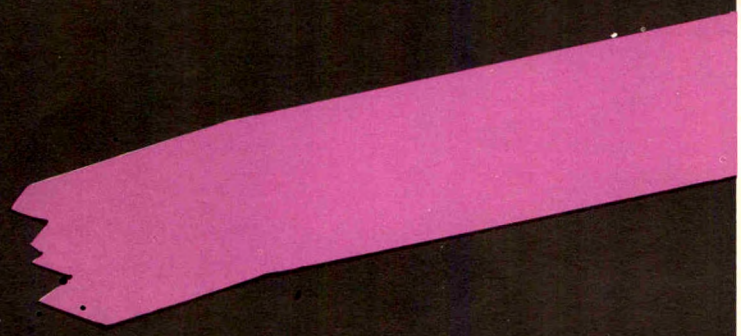
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IN CLINICALLY SIGNIFICANT DEPRESSIVE NEUROSIS...



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For details of study and brief summary, please see following page.



Mellaril (thioridazine) can help you cope with the problem of depressive neurosis because it often produces measurable improvement by the end of the first week of therapy. In 14 double-blind studies, 339 patients with depressive neurosis received Mellaril for four weeks. In these studies, 174 patients (51.3%) improved measurably by the end of the first week, and a total of 293 (86.4%) improved during the four weeks of therapy. Furthermore, 55% of the overall improvement was observed by the end of the first week.

Mellaril usually does not cause euphoria or undue sedation and is not habituating. Patients, therefore, generally remain alert and better able to respond to therapy. (The physician should, however, caution patients against participating in activities which require complete mental alertness, e.g., driving.)

MELLARIL®
(thioridazine)

TABLETS: 10 mg, 15 mg, 25 mg, and 50 mg thioridazine HCl, U.S.P.

for the short-term treatment of moderate to marked depression with variable degrees of anxiety in patients with depressive neurosis

Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides; carefully consider benefit versus risk in less severe disorders. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy, observed primarily in patients receiving larger than recommended doses, is characterized by diminution of visual acuity, brownish coloring of vision, and impairment of night vision; the possibility of its occurrence may be reduced by remaining within recommended dosage limits. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; rarely, nocturnal confusion, hyperactivity lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—Rare cases described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia. *Persistent Tardive Dyskinesia*—Persistent and sometimes irreversible tardive dyskinesia, characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and sometimes of extremities may occur on long-term therapy or after discontinuation of therapy, the risk being greater in elderly patients on high-dose therapy, especially females; if symptoms appear, discontinue all antipsychotic agents. Syndrome may be masked if treatment is reinstituted, dosage is increased, or antipsychotic agent is switched. Fine vermicular movements of tongue may be an early sign, and syndrome may not develop if medication is stopped at that time. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea; systemic lupus erythematosus-like syndrome.

Dosage: Dosage must be individualized according to the degree of mental and emotional disturbance, and the smallest effective dosage should be determined for each patient. In adults with depressive neurosis the usual starting dosage is 25 mg t.i.d. and the dosage ranges from 10 mg b.i.d. to q.i.d. in milder cases to 50 mg t.i.d. or q.i.d. for more severely disturbed patients; the total daily dose ranges from 20 mg to a maximum of 200 mg.

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Overview: Psychiatric Sequelae to Multiple Trauma

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The authors discuss the setting, patients, and staff, and the role of psychiatric consultants in intensive care units and trauma centers. They point out the similarities and differences between patients with multiple trauma and those who have had open-heart surgery and head or spinal cord injuries. They also deal with the question of an element of self-destructive behavior in accidents and offer suggestions for the psychiatric management of severely traumatized patients. The authors conclude that the role and obligation of the psychiatrist of the future will lie in crisis intervention within the medical-biological model.

A SEARCH OF THE LITERATURE reveals a paucity of information on the psychological implications of multiple trauma. It appears that professional concern for multiple trauma is limited to medical and surgical journals. We found only one article (1) that mentioned multiple injuries (only incidentally) and only one article (2) that included the term "severe trauma" in its title (written by one of us [N.S.]).

The literature on the relationship between general medicine and psychiatry deals with the emotional problems seen in intensive care units (ICUs) and those associated with medical and surgical illnesses. The usual approach involves investigation of the psychological ramifications of illnesses involving a single organ. Open-heart surgery and its psychiatric sequelae command the most attention; head and spinal cord injuries command less. Although there are marked clinical differences between these difficulties and multiple trauma, their similarities in terms of intensive care and psychiatric complications require that they be included in this discussion.

In this overview we will discuss the setting for treatment of multiple trauma, the patients, the staff, and the role of the psychiatric consultant. These separations, of course, are artificial; the interactions among them are as intense as they are important. We will also discuss the psychological implications of accidents and make some suggestions for management of patients with multiple trauma.

THE SETTING

There are many and varied types of ICUs. They include surgical, medical, coronary care, stroke, pediatric, burn, neurological, and others. Most ICUs are windowless, impersonal, highly mechanized (including electronic monitors), and overloaded with auditory and visual stimuli (3–8)—much like a "science fiction atmosphere" (6) or a "tension-charged strategic war bunker" (9). The psychological symptoms of patients subjected to this environment run the gamut of depression, delirium, hallucinations, delusions, neurosis, and psychosis. Aggressive in its therapeutic efforts, the ICU is housed in one area, and its patients are usually in-hospital transfers with established diagnoses.

In contrast, trauma victims are admitted to an emergency room, where diagnosis, investigation, and surgery invariably require their being transported to distant operating rooms (assuming the facilities are available and staffed). Recently, a new concept has been developed: the trauma center. This is a combined first-contact emergency department and ICU. The patient arrives undiagnosed and untreated directly from outside the hospital complex. Treatment demands a variety of resuscitative, diagnostic, and therapeutic measures for survival.

As a model for a trauma center, the Maryland Institute for Emergency Medicine (MIEM), formerly the Center for the Study of Shock and Trauma, is a self-sufficient unit. It occupies five floors: two floors are for patient care; one floor houses constantly staffed clini-

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cal laboratory and research facilities; one floor is devoted to hyperbaric oxygen therapy; and one floor is for administration. There are four clinical areas: the admission area, operating rooms, very intensive critical care, and step-down intensive care. Each area has its own basic nursing staff, and all areas interact with each other.

The MIEM functions as a systems control center for a statewide emergency medical service (10). Patient admission is immediate and without question from hospitals, referring physicians, and accident scenes. The patients usually have severe multiple injuries involving two or more systems and/or life-threatening illnesses resulting from overwhelming infections, suicide attempts, drownings, poisonings, ruptured aortic aneurysms, gastrointestinal hemorrhages, etc. More than 900 critically ill or injured patients are admitted to the MIEM each year. The survival rate is 80%, even though patients who are dead on arrival are considered live admissions for statistical purposes. Approximately 60% of the patients are brought directly to the MIEM from highway crashes by helicopter (11). These traumatized patients arrive suffering from varying degrees of shock and in varying levels of consciousness. A multidisciplinary, life-saving approach to the patient begins immediately at the heliport; treatment precedes diagnosis.

Within minutes of his or her arrival in the admitting area, the patient's clothes are cut away, six intravenous and intra-arterial lines are connected, intubation is performed, and laboratory and X-ray studies are made simultaneously. Intra-abdominal lavage rather than inspection and palpation is used to detect internal bleeding. Definitive surgery is performed when indicated. Comcomitant shock management is aggressive, with emphasis on adequate ventilation and volume replacement rather than dependence on pharmacological agents.

Once the patient's condition is stabilized, he or she is moved from the admitting area or operating room to a 12-bed critical care recovery unit, where he or she is intensively treated by ever-present doctors and nurses guided by electronic and laboratory monitoring. The intensive therapy begun in the admitting area continues. This includes medications, physical aids, and surgical techniques. Rehabilitation measures begin early as part of definitive care and continue through the reparative stage.

THE PATIENTS

The emotional responses of the patients seen in the trauma center include psychotic, neurotic, and behavioral reactions to the real or fantasied threats of their illnesses or injuries. The essence of the experience is stress. Even minor surgery can constitute a severe psychological threat to the patient. Any effort to understand these emotional responses must be predicated on an understanding of the fact that each person facing trauma brings to the encounter his or her own personality, which is used as a defense against the illness or injury and the factors that caused it (12).

Any threat, illness, surgery, or narcosis marshals coping mechanisms. The specific problems threatening the traumatized patient (2) include the following:

Helplessness. In any illness one becomes dependent on someone else for healing and comfort. The defense of regression follows dependency. The caretakers are viewed as protecting or parental figures. The more severe the physical injury, the more intense are the feelings of separation from family and abandonment. The amount of regression is proportionate to the severity of the injury and intensifies the patient's magical expectations of his or her helpers.

Humiliation. Injury and hospitalization also engender desperate feelings of indignity in reaction to hospital procedures, e.g., the bedpan, catheters, and taking blood. Severely traumatized patients are necessarily exposed to these procedures in the admission area and throughout their hospitalization. If they are unconscious when admitted, they experience this humiliation retrospectively when they wake up. If they are semiconscious when admitted, they might view their clothing being cut off and the other procedures as assault and battery—especially if they have been drinking alcohol.

Body image. One's body image is one's conscious and unconscious concept of the physical appearance of his body. Body image can also include one's car and clothing or one's perception of his environment, all of which contribute to a sense of identity (13). Emotional investment in a particular body organ is added to this, e.g., a woman's attitude toward the removal of a breast. In the severely traumatized patient, the threat of mutilation of his or her body is often overwhelming.

Mental symptoms. The traumatized patient may experience an altered state of consciousness due to either physical or emotional causes. Examples of physical causes are open-heart surgery, metastatic carcinoma, and massive asphyxia with resultant cerebral hypoxia. Emotional causes are usually based on a defensive dissociation to avoid an emotionally painful situation.

Patients Who Have Had Open-Heart Surgery

As indicated above, much of the literature has focused on the psychological sequelae to open-heart surgery. Other surgical procedures, such as plastic surgery, eye surgery, urological and gynecological surgery, cancer surgery, and organ transplants, precipitate psychiatric sequelae. Open-heart patients differ from trauma patients in that they have advance knowledge of what might happen to them. Trauma patients are struck suddenly, with only brief or no warning.

In spite of the fact that cardiotomy patients are more prepared than trauma patients, they often face emotional difficulties after the operation. The abundance of

articles on this subject (3, 14–22) testifies to the problem. Kornfeld and associates' review (17) is excellent. Baxter's survey (19) noted that postcardiotomy psychiatric symptoms are the most thoroughly studied of all postsurgical sequelae.

Freyhan and associates (16) studied 150 patients and found that 51% manifested psychiatric complications, a conservative estimate in view of the fact that some patients had "hidden" psychoses. Blacher (22) examined 12 "normal" cardiotomy patients and found that 4 had no overt psychosis and 8 had major symptoms. Just as syphilis can present pathologically as any medical entity, psychiatric symptoms after open-heart surgery can resemble any type of mental illness (16, 19).

Many factors contribute to the etiology of emotional disturbance after this kind of surgery. Often the cause is neurological illness and organic brain syndrome (16). We suggest that the patient brings to surgery a mild, perhaps undetectable deficit in brain oxygen caused by his or her illness. Such factors as more than 8 hours of anesthesia, more than 4 hours of bypass time, hypoxia, microembolic phenomena, membrane shifts, deleterious components in blood transfusions, the ICU atmosphere, sensory deprivation, and preoperative psychiatric disturbance contribute to psychological sequelae. The last factor gains implicit credence from the study by Kornfeld and associates (17) and Druss and Kornfeld (23): 38 of their 99 adult patients had a postoperative psychosis of the "acute organic variety"; none of the 20 children in the same study had a similar disturbance, however. (In contrast to study of the cardiotomy patient, there is no opportunity to evaluate the trauma patient preoperatively.)

Generally, the postcardiotomy psychiatric sequelae are in the form of a delirium state and are temporary. Preoperatively, neurotic reactions are exhibited by predisposed individuals who seem to be reaching for a longer life. Many, if not most, of these patients have suffered chronic physical ailments and have come to accept dependency as a way of life. Corrective surgery imposes a burden on them to relinquish this adjustment and to find new techniques for everyday living (12, 24).

An empirical observation at the MIEM is of interest: 8 patients with a ruptured abdominal aneurysm (4 survived) demonstrated over an 18-month period the onset and resolution of delirium in 3 to 5 days. In these cases there was no pump time and no prolonged anesthesia, but the postoperative psychiatric symptoms were similar to those seen after a cardiotomy. The assumption in both situations is that these patients had chronic ischemia before surgery and then received a hypoxic insult: the cardiotomy patients during surgery and the ruptured aneurysm patients before surgery, when blood loss was massive.

Patients with Head or Spinal Cord Injuries

Head and spinal cord injuries approximate multiple trauma. However, the literature, with one exception (1), is concerned with single system injury. Most of the writings have been oriented toward the posttraumatic syndrome or posttraumatic neurosis (25–34). Because head and spinal cord injuries often result in permanent emotional or physical disability, there is a pressing concern for rehabilitation in these cases (25, 32, 35, 36).

Head injury usually produces subjective symptoms. Headaches, fatigue, vasomotor lability, dizziness, poor concentration, irritability, personality changes, and vague somatic complaints comprise the usual pattern. The etiology of these sequelae is uncertain. Weinstein and Lyerly (37) suggested that unconsciousness for at least 8 hours might be a cause. Others (27, 32) have suggested that a history of alcoholism might predispose some patients to subdural hematomas. The most controversial etiological factor suggested is the possibility of financial compensation, which Miller (38) suggested might be a determinant of resistant symptoms.

It has been our experience that the real culprit is time. If rehabilitation of the patient with posttraumatic syndrome is undertaken within the first 6 months, the patient usually does well. If it is undertaken after 2 years, the rehabilitation potential falls to near zero. During this prolonged interval the patient becomes dependent on spouse or family for financial and emotional support. The male patient has the added problem of role reversal, and no amount of money can motivate him to "get up the nerve" to face the outside world. A similar pattern prevails in patients who have retired from work, particularly those who have not planned for retirement.

Spinal cord injuries can only be considered in the context of physical and emotional rehabilitation. Second cervical spinal transections are the most serious because the patient cannot survive without life support systems. These injuries evoke the most debate in the polemical area of euthanasia. Space limitations interdict our participation in this discussion.

In a perceptive paper, Bucy (39) offered some interesting statistics on paraplegics. Each year, 10,000 persons in the United States (50 per 1 million) become paraplegics. Eighty-five percent are men 18 to 25 years of age, and 50% of these cases result from auto accidents; the remainder result from other accidents, predominantly those involving sports.

According to Mueller (35), the emotional problems of paraplegic patients stem from the role reversal from independent to dependent. The initial reaction is depression, despair, bitterness, and grief. How well the patient adjusts depends on his or her personality assets or liabilities. Some preoccupy themselves with frustration, autistic thinking, and dependency as they relate to their damaged body image. Others, with family support and an acceptance of their physical limitations, seek a new role in life. They are motivated to set goals and accomplish social, economic, and vocational objectives.

The body image problems of paraplegics are differ-

ent from those of amputees. The latter experience phantom limb sensations. Paraplegics' efforts at denial are difficult because they can see their extremities. They also have to adjust to other physical disabilities: root pain can be severe, bladder and bowel control may require many surgical procedures, and sexual capability can be an overriding concern; however, the latter can be alleviated by physical and plastic aids and ingenuity.

Multiple Trauma Patients

Severely traumatized patients are usually products of automobile accidents, shootings, stabbings, falls, etc., and are generally in shock, unconscious, and near death. Unlike cardiotomy patients they are unprepared for the experience.

The core experience for trauma patients is unconsciousness. After 3 to 15 days in this state, they attempt to fill the void in consciousness retrospectively. Of 68 patients interviewed after gaining consciousness at the MIEM, 43 were amnesic, 8 were initially amnesic but subsequently recalled their experiences, and 17 recalled the experience without difficulty. The latter two groups used fantasies and distortions in their recall (2).

Many traumatized patients are amnesic, but some, if given enough time and fed bits of information by relatives, report dreams they had while in the unit. An almost universal theme of these fantasies is being held prisoner. The reason for being incarcerated is highly individualistic and predicated on the particular patient's psychological development. Of 25 patients interviewed at the MIEM, 22 recalled feeling that they were being held prisoner. Fourteen of these patients recalled feeling that they were trying to escape.

Interwoven, and perhaps interrelated, with the fantasies of imprisonment is the patient's feeling a very real death-like experience. At times there is a conviction that one is dead; at other times there is doubt as to whether one is dead or alive. Some patients report both experiences. Others, feeling the uncertainty, encounter and observe death. Of 25 patients interviewed at the MIEM, 18 recalled feeling that they were dead. Fifteen of these patients recalled feeling that they were "just nothing," and 3 recalled not being sure whether they were dead or alive. It is interesting that none of the 25 patients expressed feelings about dying. The 18 patients who reported a death-like experience referred only to the state of death.

One can readily identify with the patients in this position. They are incarcerated in a featureless cubicle and have no contact with the normal world. There are no windows, no pictures, no flowers—just masked, hatted, uniformed wardens who usually hurt. The patients are deprived of sleep (if they are conscious) by 24-hour monitoring, the hiss of a respirator, and background noises. Their transfer by helicopter makes its own realistic contribution to the patients' sense of physical disorientation.

Disorientation and depression occur frequently on the unit. The staff members are alert to these sequelae and respond appropriately and quickly. Such personal items as photographs and tape recorders are provided, as well as verbal reassurance.

Two pertinent issues merit discussion. One is the differentiation of postoperative delirium from postoperative psychosis, and the other is the differences between the typical ICU patient and the typical trauma center patient.

Classical delirium demands an investigation of organic causes, but functional psychosis requires watchful waiting and proper supportive measures. Psychosis is usually resolved in 48 to 72 hours (40) and can be established by ruling out organicity and by finding out if the patient has a history of predisposition to psychosis. Disorientation and visual hallucinations suggest a metabolic disturbance and toxicity.

Although both psychosis and delirium may be evident in the ICU and the trauma center, the patients in these two kinds of facilities differ. The patients in the ICU are prepared; the trauma patients, as a rule, are not. The trauma center patients are usually unconscious when they are admitted, and their unconsciousness may be prolonged; they awaken to total confusion.

Not only are trauma patients unprepared, but they must account retrospectively for the void in their consciousness. One of the 22 patients at the MIEM who recalled feeling imprisoned felt that he was being held prisoner because he had killed a schoolbusful of children with his heavy truck (his injury occurred when he was crushed between the body and the cab of his truck while parked) and because he believed that he had urinated in bed. He observed his death by seeing his name on a tombstone. Another patient, a widow who had been injured when she drove her car over an embankment, felt that she was being held to be sold into white slavery.

The crucial dynamic in both cardiotomy patients and traumatized patients is a system of defenses. The cardiotomy patients have mobilized their defenses; the trauma patients have not. With the return of awareness, the trauma patients' defenses are intensely mobilized as the patients seek an explanation for the void in their consciousness. Although this is usually a homeostatic effort, it evokes painful images of death and fantasies of "badness" as reasons for incarceration. These unrestrained beliefs are the products of severe psychological regression accompanying the injury. Emotionally, the patient is a child in a punitive situation that he or she deserves.

THE STAFF

The staff are the "heart and soul" of the ICU and the trauma center. Collins and Ballinger (4) stated that "people more than anything else determine its value."

In a trauma center there are many emotional compensations for the staff in the affectively intense and

critical caretaking. The staff carry great responsibilities and can thereby gratify their omnipotent fantasies. They also encounter great stresses, frequently compounded by fatigue. In addition there are different transference and countertransference attitudes among the physicians, nurses, and ancillary personnel.

Physicians

The recent emphasis on the study of the total person and the recent increase in specialization have had a curious impact on patients. As a byproduct of this paradox, patients are cared for by scientists rather than family doctors (12). The trauma team aims at combining various medical and surgical specialties to treat the patients' multiple injuries and their psyches—to treat the total person.

The physician's sense of omnipotence is a double-edged sword. It spurs him or her to work long hours, far beyond the call of duty. Saving the patient's life is paramount. When physicians succeed, they radiate charm and good humor. On the other hand, when their omnipotence fails, they can be irritable or, after a long, hard battle to save a patient, shed tears for themselves as well as the patient. There are some physicians who experience a patient's death as an attack on their training, competence, person, and the integrity of their fantasies of being godlike (41).

Hay and Oken (9) reported the reaction of physicians in an ICU when a patient was failing. They became very authoritative with the nurses, demanding that they be waited on. Also, they either disappeared or tried all sorts of vain heroic measures.

The emotional tensions of the work predispose physicians in trauma centers to peaks and lows in relationships with their coworkers. Dedication to the task of saving lives, however, supersedes transient human frailties. The test of the physician rests in the quantity and quality of the lives saved.

Nurses

In the trauma center nurses are an integral part of the decision-making process and are involved in the crucial aspects of the patient's care. They may be required to act without hesitation, often on the basis of their knowledge and experience alone. Diagnosis becomes an important part of their job if they are to initiate treatment with the split-second timing necessary to save a life. The emphasis is on coordination, planning, and patient assessment so that crises can be avoided. The nurses' responsibilities can be overwhelming or gratifying, irritating or satisfying.

Our observations coincide with many of those of Hay and Oken (9). For the nurse, the ICU and the trauma unit are inherently stressful environments: the machines (they must also be mechanics), the constant stimuli, and the overload of patients, some of whom are bloody, incontinent, and/or dying. Coping requires some degree of defensive detachment (3). The routine can be repetitive, and patients' relatives are always around. The nursing administrative staff are not always aware of the demands made on nurses in the trauma unit.

Bilodeau (42) and Kellogg and Curran (43) came to similar conclusions: that the sources of satisfaction are also the sources of dissatisfaction. The sources of stress fall into the categories of patients and patient care, peer personnel, physicians, the environment, families, personal difficulties, and conflicts with other areas of the hospital. Frustration is manifested by fatigue, forgetfulness, depression, and guilt. The defenses used against these problems are denial, displacement, projection, repression, reaction formation, and passive aggression.

There are compensations in the esprit de corps of the trauma center staff in spite of occasional lapses in cooperation. Although not condoned, mistakes can be forgiven. The overall feeling of the staff is one of elitism, a fact not borne very gracefully by such "outsiders" as the general hospital nurses.

The trauma center nurses, without exception, are psychiatrically oriented. At times they are too much so; there is a tendency toward overidentification with the patient and/or his or her family. Occasionally what seems to be a paradox occurs: when aggressive therapy is discontinued (with the family's awareness), one or several nurses will complain about the physician giving the order; on another day, the same nurse or nurses will be critical of a physician for not terminating aggressive therapy with another patient. Situations like these are handled in group meetings, discussions with supervisors, psychiatric consultation, reading, courses, and seminars. Good physician-nurse communication is essential to the trauma unit.

Unlike other physicians and nurses, those in a trauma center must wait until patients regain consciousness to establish a relationship with them. The physicians as well as the nurses must develop skill in communicating with tracheostomized patients who cannot talk and who may be delirious. They must anticipate, sense, and read the patients' eyes, gestures, and body language. At all times, they must also be available to reassure the patients' families, either in person or by telephone.

THE ROLE OF THE PSYCHIATRIC CONSULTANT

Lipowski (44) discussed the history, scope, aims, organization, and functions of the psychiatric consultant. He stated that the consultant acts as a "mediator and bridge builder" between the medical-biological and psychiatric-behavioral disciplines. He emphasized that a consultation service should be staffed by full- and part-time psychiatrists, liaison nurses, social workers, and psychologists. He also stated that "a consultant is invariably a therapist."

The University of Maryland Department of Psychiatry provides a liaison service to other areas of the university's general hospital. The MIEM has this service incorporated into its organization. We have a chief of

the psychiatric branch, a family services branch, social workers, psychiatric nurses, and a resident who rotates from the liaison service of the department of psychiatry.

That psychiatric referral from other disciplines is accomplished with reluctance is a fact of medical life. Territoriality strives to "protect" patients from psychiatric intervention (45). However, it has been our experience that the psychiatrist's personal willingness to be involved and available increases his or her use as a consultant. As time goes on, he or she becomes friend, counselor, partner, and troubleshooter. In a trauma center psychiatric consultants are like circuit riders. They are on the scene, taking their services to the consumer—quite the opposite of working in one's office. The psychiatrist does not "visit" the unit, he or she "lives" there.

In a unit as intense as the MIEM, which has a large number of personnel and a psychiatric consultant available, curbstone consultations are inevitable. The personal problems of the staff become the confidential province of the consultant, who deals with such problems as referrals for psychotherapy to psychiatrists who are not connected with the unit, depression, psychosis (rarely), suicide attempts (rarely), abortion counseling, family decisions, and problems with boyfriends or girlfriends.

Koumans (46) described the dividends for the psychiatrist on an ICU: appreciation and communication between medical and psychiatric staffs and better use of the consultant's time and skills. After more than 3 years of experience with this concept in a trauma center, we would add that there are other personal satisfactions. The MIEM is unique; the diversity of acute medical and surgical problems we handle gives the psychiatric consultant a perspective of people and health care that he or she could not get in an office or in a single-specialty ICU. The psychiatrist "living with" the unit develops a gratifying sense of belonging as a team member. (On the other hand, he or she may occasionally be viewed simply as a medical colleague; other staff members forget that he or she is also a psychiatrist.)

DISCUSSION

War brings with it sudden, overwhelming numbers of casualties. The same applies to epidemics and such physical disasters as earthquakes and airplane crashes. The trauma center, of which the MIEM is a unique example, is the proving ground for the competent management of these emergencies.

We think it is important that accidents are the leading cause of death in people between the ages of 1 and 37 in the United States (47). Hirschfeld and Behan (48) stated that accidents "are events which are captured by the personality for the purpose of solving the individual's life problems." Reflecting a similar attitude, Rome (49) stated,

> Very little in nature is truly capricious, deserving of the designation "accident." For the most part, our use of the term actually means that the antecedents of the event have not been analyzed in sufficient detail to establish the logical, scientific basis required for a suitably parsimonious explanation of its pathogenesis.

In *Accident or Suicide?* (50), drinking rather than a desire for self-destruction was incriminated as a cause of accidents. Three groups were compared: 25 accident cases, 29 completed suicides, and 31 completed appendectomies. There was little difference between the accident patients and the appendectomy patients as to self-destructive tendencies. Our empirical observations at the MIEM leave some doubt as to the validity of this study, however. One-third of the 25 accident patients were amnesic, but 43 of the 68 patients we interviewed at the MIEM (well over half of the patients) were amnesic (2). Perhaps further research can confirm or dispute their findings.

Other investigators have concerned themselves with the question of self-destructiveness as it relates to accidents. Crancer and Quiring (51) compared the driving records of 915 persons hospitalized for suicidal gestures with those of 687,228 drivers in Washington State. The suicidal gesture group had an 81% higher accident rate, a 14% higher violation rate, and had had significantly more violations for accidents resulting in injury, for drunk driving, and for negligent driving. Selzer and Payne (52) conducted a similar study and came up with similar findings: patients with self-destructive tendencies had twice as many automobile accidents as those without these tendencies.

The combination of drinking alcohol and a tendency to self-destructiveness also contributes to the possibility of accidents. Hämäläinen (53) concluded on the basis of a study of one-car accidents that there is "a certain link between auto accidents and self-destructive trends in Finland." One can readily assume that the combination of alcohol consumption and driving is injudicious and a reflection of self-destructiveness.

A particularly fascinating area of research is the problem of amnesia. Very little has been done on this subject since Weinstein and associates (1) studied amnesia as a language pattern in 1962.

Weisz and Boyd (54), who reported on a trauma center in an "underprivileged" urban area, pointed out a tendency for a high incidence of trauma in certain communities. They described a pre-trauma sociopathic personality-trauma-enhanced sociopathic behavior interrelationship. They concluded that a study of the epidemiology of trauma in socioeconomically deprived areas would be useful.

Beyond the physical management of trauma there is an urgent need for psychological investigation. Some of the questions that need answers to complement the work of the traumatologist are, What was going on emotionally within the patient before his or her accident? Was there an unconscious wish for suicide? Did the victim unconsciously structure the "accident"? Does the alcoholic state mask something else? Are the

fantasies of death and imprisonment derived from real or fancied guilt for the accident? What significance do the organically induced alterations in levels of consciousness have in psychological defensive operations?

PATIENT MANAGEMENT

Management of the traumatized patient begins with preventing complications, if possible. Braceland (15) suggested that cardiac surgery patients be told what to expect, that a clock and/or a calendar be placed in the ICU, that the patient be removed to a private room as soon as possible, and that the staff not get strung out. Others (19, 46, 55, 56) have recommended that visitors be allowed but restrained when necessary, that the ICU environment be softened, and that a psychiatrist be on the staff.

The presence of multiple trauma requires immediate and aggressive therapy. When time is of the essence, one cannot be mindful of the humiliation a patient might feel when his or her clothes are being cut away. Once the patient is stabilized there is time to be aware of the patient as a person who is feeling threatened and has mobilized his defenses. This is not to imply, however, that the trauma team neglects a humane concern for the patient.

Some suggestions arise in interviews with patients about their experiences. When patients are unconscious (or seem to be, as with stroke), they need to be spoken to, called by name, touched, and handled as gently as possible. Obviously, prognostications at the bedside should be avoided. The patient who starts to detail "crazy ideas" needs reassurance, verbal support, and appropriate medication.

CONCLUSIONS

The day may not be too far off when surgery, at least in the Western world, will be limited to trauma, transplantation, congenital defect, and cosmetic repair. It behooves the psychiatrist to be alert to this possibility because his or her insights will be needed. In the trauma center as in the ICU, crisis is a way of life. The role and the obligation of the psychiatrist of the future will lie in crisis intervention within the medical-biological model. The team concept, with its multidisciplinary approach, ensures that the patient will receive intensive treatment according to the highest standards of the practice of medicine.

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Effects of Peer Review on Outpatient Psychotherapy: Therapist and Patient Follow-Up Survey

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Interviews with 80 therapists and 50 patients at a community mental health center revealed that peer review effectively monitored the appropriateness of treatment and allocated limited treatment funds without unduly interfering with established treatment patterns, relationships, or outcomes. Most therapists reported receiving helpful consultation from the peer review committee, and the process encouraged them to focus more clearly on treatment goals. On the other hand, patients were concerned about the committee's role in making decisions about their treatment. Therapists noted as a problem the lack of certainty in establishing a treatment contract prior to peer review since the contract with the patient must remain fluid during the evaluation period. The therapists and patients demonstrated remarkable agreement in their assessment of treatment progress and whether further therapy was needed.

THIS PAPER REPORTS on the effects of a peer review system on psychotherapeutic relationships and outcomes from the perspective of both therapists and patients. The study was conducted at Peninsula Hospital Community Mental Health Center in Burlingame, Calif. This mental health center, which opened in 1969, serves approximately 2,500 people per year from its catchment area of 95,000 and has developed a comprehensive array of both direct and indirect services. The center operates on a private practice model, with all of the therapy provided by privately practicing psychiatrists, psychologists, and social workers in the 80-member department of psychiatry.[1]

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[1]For a fuller description of this model of service delivery, see reference 1.

Approximately 60% of the patients seeking help at the center are eligible for state and county funds, which are provided to subsidize the cost of treatment for those patients who cannot afford the full cost of care but are ineligible for Medicaid. While the mental health center has a contract with San Mateo County to provide treatment to this group of patients within the catchment area, there is a limited budget with which to do this.

After a year's experience with the fee-for-service private practice model and laissez-faire spending for treatment, it became obvious that a system was needed to more judiciously allocate the center's budgeted state and local funds. In order to meet this need, the department of psychiatry and the center established a peer review committee in March 1971 and specified that outpatient cases must be reviewed after 6 visits with the therapist. Since the inception of this peer review system, there have been approximately 2,000 outpatient case reviews.

The architects of this peer review system felt that since the reviewers would be under pressure to shorten treatment recommendations, the committees should be composed of clinicians oriented toward long-term treatment in order to achieve a balance; this tradition has persisted. Three therapists serve on each review committee: two are attending therapists from the department of psychiatry who are paid a clinical fee for their review time; the third reviewer is a member of the salaried clinical staff of the center. Therapists present their cases at weekly meetings, and the committees and therapists jointly work out a proposed plan of treatment linked to explicit treatment goals. While the committees exercise full control in authorizing the use of services and, therefore, the allocation of the budgeted community funds, the atmosphere of the meetings is more akin to that of a clinical case conference than an administrative review. The overriding goal is to maintain the delicate balance between clinical needs and fiscal realities.[2]

When the negotiation of the treatment plan was changed from the sole control of the therapist and patient to include the peer review committee, there were many concerns about the impact of such a system on the patient-therapist relationship and the course of treatment. Clearly, the introduction of any third party into the treatment relationship has a poten-

[2]For a more complete discussion of the format and functioning of this peer review system, see reference 2.

tial for significantly altering that relationship, with possible effects on the outcome of therapy. Since the third party in this case was a committee of peers, with whom the therapists had professional and often social contacts, and which was empowered to make decisions about modalities, frequency, and duration of treatment, the potential for impact upon therapy seemed very great and led to this study.

Interviews were conducted with all of the 80 attending therapists regarding their general reactions to peer review. In addition, the 60 therapists who had treated 1 or more terminated patients whose cases had been reviewed were asked questions about the impact of peer review on selected cases. The interviews were conducted in the therapists' private offices with full assurance that the material would be considered confidential. The interviewers were graduate students in psychology who were hired specifically for this project. Of the 103 patients in our sample, 60% were treated by psychiatrists, 17% by psychologists, and 23% by social workers. Fifty of these 103 patients were interviewed regarding their treatment, and their responses were compared with those of their therapists regarding the impact of peer review on the entry into treatment and the adequacy of treatment provided.

IMPACT OF PEER REVIEW ON ENTRY INTO TREATMENT

Only 31% of the therapists said they would be less inclined to accept a patient whose case required review than they would a private patient. It is interesting that 35% of the psychiatrists expressed this reluctance, compared with 50% of the psychologists and only 11% of the social workers. An additional way of avoiding peer review is to terminate the patient before the time for review. However, the proportion of patients who terminate in 6 sessions or less has decreased from over 40% before the implementation of peer review to 24% during the last fiscal year.

The therapists reported that the peer review requirement affected their history taking in about one-third of the cases. Their primary comment was that they felt under pressure to obtain a more detailed case history for presentation to the committee and therefore more actively questioned the patients, rather than letting them reveal the material at their own pace. Similarly, one-third said that peer review affected how they set treatment goals; they often commented that they had to think in terms of more time-limited, concrete goals instead of letting the patient set the pace. A number of respondents commented that knowing they would present the case led them to think more distinctly about treatment goals. Approximately one-fifth reported that they kept more thorough notes on patients to be presented to peer review, and 10% said that peer review had some effect on their specification of a diagnosis.

In general, the findings indicate that peer review did not affect treatment as much as many had anticipated. It is apparent that peer review had its largest impact on preparing the patients for treatment; this factor was mentioned in half the cases. Not surprisingly, the therapists generally commented that they had to leave the treatment contract open and inform the patient that continuing treatment would depend on the committee's decision.

PATIENTS' REACTIONS TO PEER REVIEW

There were substantial differences in the way that patients and therapists described the process of establishing a treatment contract. In almost one-fourth of the cases, therapists and patients disagreed about whether they had discussed the matter of the peer review committee. In only 3 of the 50 cases (6%) did the therapists state that they did not tell the patient about the peer review process, and in 3 other cases (6%) they could not remember. In 42 of the cases (84%) they said that they told the patient before the peer review presentation, usually during the first visit. There was considerable variation in what was said, however, with some therapists describing the process at length while others only mentioned it briefly. Some described it to the patients as a case review and others, as a financial discussion. One therapist told his patient that the decision about treatment was completely up to the committee.

It is interesting that 12 of the patients (24%) stated that they were not told about peer review and 2 others (4%) could not remember being told. Only 1 therapist and 1 patient agreed that the issue had not been discussed; of 12 patients who claimed they were not told about the committee, the therapists claimed that they told 10 of them. This difference is quite striking and is reminiscent of other issues about which patients often claim they were not told, such as being charged for missed appointments or therapists' vacation plans. On the other hand, some therapists might not have recalled the omission or were too embarrassed to admit that they had neglected or glossed over such an important issue in the therapy.

One-third of the patients did not like the idea of their therapist discussing their treatment with a committee, one-third said it did not matter, and one-third said that it was fine with them. Those who felt negatively about it were concerned primarily about the issue of confidentiality and resented anyone other than their therapist making decisions about their care. They were concerned that the therapist might not adequately portray their needs to the committee, and many feared that the committee would set a higher fee than the therapist had set. Those who claimed indifference to the committee generally explained that this was the price one paid for low-fee, publicly supported therapy. Of those who felt positively about it, many said that they could benefit from the committee members' experience and recommendations. The patients made similar re-

sponses when they were asked about the committee's power to make decisions about their cases.

IMPACT OF PEER REVIEW ON TREATMENT RELATIONSHIPS

The therapists felt that peer review had no effect on the establishment of a therapeutic alliance with three-fourths of their patients. Of the 25% who said that it had an effect, approximately two-thirds, or 20% of the total, felt that it interfered, while one-third, or 10% of the total, reported that it improved the establishment of a therapeutic alliance. Those who felt it interfered generally commented that they were initially less involved, tried to minimize any transference, and did not want to open up certain areas with the patient if they would not be able to continue the therapy. One therapist commented that he scheduled a second review of a case since he felt angry and was dissatisfied with the committee's recommendation. He felt that the patient sensed his confusion and it disrupted the alliance. On the other hand, one patient who worked in a bureaucratic situation felt that the therapist better understood bureaucracies and was more of an ally after participating in peer review as her advocate.

The therapists felt that their patients' resistance to treatment was increased by the peer review process in slightly more than one-fourth of the cases. One therapist stated that his patient, who was highly resistant to looking at herself, was able to focus her concerns on the committee's impending decision and thereby bolster her attempts to deny her problems. Another therapist stated that her patient misunderstood their early discussion about the committee and missed the sixth appointment, saying, "If 6 sessions is all we have, don't offer me anything." In another case, the therapist noted that the patient was very reserved until the committee decision was made; she then allowed herself to become close to the therapist.

On the whole, however, both the therapists and patients agreed that the review requirement did not interfere with their treatment relationships. Of 34 patients who knew about peer review, only 18% felt that the committee interfered with their relationship with their therapist, and several of these patients said that they consciously withheld information about themselves until the committee had met and decided on the treatment plan. Only 9% of the patients indicated that their feelings about their therapists changed because of the requirement to present the case, but many respondents gave brief and guarded responses about this issue. The therapists felt that the peer review requirement had no effect on their professional image with most of their patients. They felt that their image was eroded in 16% of the cases, while in 10% they felt that it was enhanced. About two-thirds of the patients and therapists agreed that peer review did not have a negative effect on the therapeutic relationship. In half of the remaining cases only the therapists felt that it interfered, and in the other half only the patients felt that it interfered. In only one instance did both patient and therapist agree that peer review interfered with their relationship.

Thus the most significant initial effects of the peer review requirement were in preparing the patients for treatment, gathering the histories, and setting goals for treatment.

PEER REVIEW PRESENTATION

In presenting the majority of the cases to the peer review committee, the therapists reported that they felt that they served as an advocate to obtain the necessary resources for the patient and that they also received consultation from the committee.[3] It is interesting that while three-fourths of the therapists felt that they received consultation, 80% reported that the review had no effect on their evaluation of the patient. This is consistent with frequent comments that the consultation confirmed their own clinical impressions. Virtually all of the therapists whose evaluations were altered by the review felt that the review was helpful. Typically, the review was helpful in setting realistic expectations for the patient and exploring countertransference issues.

In two-thirds of the cases, the therapists reported that the committee's decision was consonant with their own treatment plan. In the context of this positive finding, however, several therapists remarked that they had already scaled down their requests since they were aware of the fiscal constraints. It is thus difficult to know precisely how much the presenting therapists internalized the function of the committee and reduced their requests to conform to their perception of what the committee would approve. In one-third of the total cases, the committee recommended changes in the therapists' original treatment plans. The most frequently recommended change called for a reduction in the length of treatment (22% of all cases). Other alterations in treatment plans included changes in modality (13%), approach (12%), and frequency of sessions (13%). (These percentages total more than one-third since in some cases the committee recommended more than one change.)

OUTCOME AND ADEQUACY OF TREATMENT PROVIDED

In evaluating the results of therapy, the agreement between patients and their therapists was quite remarkable ($\chi^2 = 17.01$, $p = .002$). In both groups, an average of 77% felt that the patient improved, about 18% felt that he remained the same, and about 5% felt that he got worse. Of the 37 patients who felt that they improved,

[3]For a discussion of the educational potential of peer review, see Newman and Luft (3).

their therapists thought that 32 of them improved and 5 of them remained the same. Of the 4 patients who felt they got worse, their therapists thought that 1 was worse, 1 better, and 2 were the same. Of the 8 patients who felt they remained the same, their therapists felt that 3 were the same and 5 were better.

The patients and therapists also agreed to a significant extent about who needed more therapy and who did not, with total agreement in two-thirds of the cases ($\chi^3=6.47$, $p=.04$). Of the 22 patients who felt that they needed more therapy, their therapists felt that only 6 of them had had an adequate amount of treatment. Similarly, of 20 patients who felt that they had had an adequate amount of treatment, their therapists observed that only 5 of them should have had more therapy. The therapists felt that 44% of their patients should have had more treatment, that 30% had adequate time approved, and that 26% had other extenuating circumstances that generally led to the patient's termination. One-third of the patients in this sample later returned to the therapist or entered treatment elsewhere, with 20% becoming privately paying patients continuing with the same therapists.

Although the therapists felt that only about 30% of the patients had had an adequate amount of time in therapy, almost 60% of the patients did not use all of the time allotted to them by the peer review committee. In 75% of the cases up to 32 hours of treatment were approved; but the maximum time used was 16 hours. The median time approved was 15 hours, while the median time used was 8 hours. These median figures are similar to those reported by Langsley and Lebaron (4) in their survey of 97 private-practice psychiatrists in the Central California Psychiatric Society, which showed a median number of office visits from 8 to 13 for patients in different diagnostic categories. Not surprisingly, the range reported in that survey was far greater, with as many as 390 visits reported for patients in some diagnostic categories, while the maximum time approved by the Peninsula Hospital peer review system was 104 hours in this study.

For both therapists and patients chi-square analysis revealed no significant relationship between duration of treatment and improvement. Similarly, for both groups there was no significant relationship between duration of treatment and the need for more treatment. Thus it appears that one cannot predict how much more therapy patients may need by reviewing how much treatment they have already had; such decisions must be made on an individual basis.

Most of the members of the department of psychiatry preferred insight-oriented individual psychotherapy; yet in this patient sample they listed it as the primary treatment modality for only one-fourth of the patients. (See table 1 for a breakdown of the treatment modalities used.) We asked the therapists whether the patients would have been in longer-term insight-oriented therapy were it not for the limitation of funds and peer review. However, they responded that this would be appropriate in only 30% of the cases and that it might possibly work in an additional 5%. Thus it appears that while most of the patients were not in insight-oriented treatment, the reasons for this were not due to peer review or financial limitations; rather, the therapists felt that these patients were not able or motivated to use this form of therapy.

TABLE 1
Treatment Modalities Used with 103 Cases Examined by the Peer Review Committee

Treatment Modality	Cases	
	Number	Percent
Supportive treatment	29	28
Insight-oriented individual psychotherapy	26	25
Several modes	15	15
Evaluation	10	10
Group therapy	8	8
Crisis intervention	7	7
Reality therapy	5	5
Marriage counseling	3	3

Thus we can conclude that although most of the patients did not use the total time allotted to them by peer review and both therapists and patients felt that the patients often should have had more treatment, they nonetheless agreed and were quite positive in their assessment of the effectiveness of the treatment provided. Furthermore, most of the dissatisfaction with the length and modality of treatment was attributable to factors other than peer review.

Finally, we hypothesized that the therapists' participation in peer review would have an effect on their treatment of nonreviewed patients, but this turned out to be minimal. None of the therapists said that it affected the types of patients they saw, and only about 10% said that it influenced the modalities they used or the length of treatment for their other patients. The most significant response was in terms of setting goals for treatment. Overall, one-fourth of the therapists who had presented more than 10 cases to the committee said they now thought more concretely and systematically about treatment goals for all of their patients.

SUMMARY AND CONCLUSIONS

The impact of peer review on the treatment process was not as disruptive as many had feared and in fact was deemed helpful in certain situations. Peer review appears to help the therapists focus more clearly and concretely on the establishment of treatment goals, and for those who present frequently to peer review, this carries over to their non-peer-review practice as well. On the other hand, one of the problems that presenting therapists frequently note is that, with third-party involvement in the formulation of a treatment plan, the contract with the patient must remain fluid

during the 6-session evaluation period. In some cases this lack of certainty at the interface between evaluation and treatment is a problem, which at times actually leads to no treatment contract being made.

There were considerable differences in how therapists explained peer review to their patients, and one-fourth of the patients reported that their therapists never told them about it. Patients' reactions to the committee's role were mixed: one-third stated they did not like others making decisions about their therapy and were concerned about confidentiality; one-third said they were indifferent to the committee; and one-third thought they could benefit from the professional expertise of the committee. Overall, however, only a small percentage of the therapists and patients felt that the peer review committee interfered with the establishment of a therapeutic alliance and with therapeutic progress. Three-fourths of those presenting cases felt that they received consultation from the committee, and this consultation often confirmed their diagnosis and treatment plans and at times helped resolve difficulties and issues of transference and countertransference.

While our primary concern was overutilization, with peer review the patients used less than three-fourths of their authorized treatment time, and this allotted time was often felt to be minimal by the review committee. Furthermore, these data show that patients and therapists demonstrated remarkable agreement in their determination of when therapy was adequate and when more treatment was needed. Some patients did quite well with 6 visits, whereas others were felt to need more treatment after 100 visits. It is clear that treatment needs are an individual matter, and systems that attempt to fix treatment duration according to diagnosis or symptoms cannot help but miss the subtleties that can be evaluated in a case conference or by the therapist and patient together. It appears that in the system studied, the peer review committee effectively monitored the appropriateness of treatment and allocated limited treatment funds without unduly interfering with established treatment patterns, processes, or outcomes.

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Behavior Therapy and Sex Therapy

BY JOHN PAUL BRADY, M.D.

Behavior therapy is characterized by the way in which clinical data are collected, analyzed, and used in the treatment program–specifically, the application of the methods of experimental and social psychology. A case history of the behavioral treatment of a sexual problem is presented to illustrate this process. Many people have assumed that the "new sex therapy" is behavior therapy because of its focus on the here and now and similarities in particular treatment maneuvers. However, the author notes that sex therapy is behavior therapy only to the extent that it deals comprehensively with environmental, interpersonal, and organismic factors that operate to maintain the sexual problem.

THE TERM "sex therapy" has come to mean highly directive approaches to the treatment of sexual dysfunction in individuals or couples. In these approaches, focus is on manifest sexual problems and interactions in the here and now. The bold and innovative approaches developed by Masters and Johnson (1) and further elaborated by Kaplan (2) and others clearly indicate that many sexual problems can be substantially improved without lengthy, insight-oriented, psychodynamic psychotherapy, i.e., without involving presumed unconscious and unresolved conflicts and deep-seated personality disorders. Because of this focus on manifest behavior, many clinicians have stated or implied that the "new sex therapy" is really behavior therapy for sexual problems. Indeed it is true that some of the therapeutic manipulations of a behavior therapist in the treatment of a particular patient may resemble those employed by a sex therapist in a similar clinical situation. This similarity is often more apparent than real, however. A fundamental difference is seen when we examine the behavior therapist's total approach to the patient. In this paper I will try to elucidate this difference by describing the essential, distinguishing features of a behavioral approach and presenting a case history illustrating this approach in the psychiatric treatment of a case of sexual dysfunction.

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Behavior therapy or behavior modification is an approach to clinical problems that makes extensive use of the findings of empirical behavioral science. Particular use is made of the body of knowledge developed by experimental psychologists and known as principles of learning or learning theory, which describes the lawful relationships between the behavior of an organism and its physical and social environment. However, more central to a behavioral approach than any particular set of experimental findings is the use of methods of experimental and social psychology, specifically, the use of methods of procedure and rules of evidence termed "methodologic behaviorism." These have been succinctly summarized by Mahoney (3) and include an assumption of determinism (systematic relationships characterize certain classes of events), the use of operational definitions of variables, an emphasis on controlled experimentation and the independent replicability of observations and results, and the falsifiability (testability) of hypotheses.

The behavior therapist uses a similar strategy in his approach to clinical problems. By a combination of a detailed history and direct observation, he seeks to relate the various problematic behaviors (symptoms) of the patient to other identifiable events of a physiological, behavioral, or environmental nature. Such an analysis leads to clinical hypotheses about the "meaning" of the patient's symptoms—not in any philosophical or final sense but in the natural science sense of functional relationships among observable variables. A program of behavioral treatment consists largely of testing these clinical hypotheses, often by manipulating behavioral and environmental variables thought to be functionally related to the patient's difficulties. Thus the distinguishing characteristic of behavior therapy is the manner in which clinical data are collected and analyzed and then made use of in the design of the treatment program (4, 5). I will describe the behavioral treatment of a patient with a sexual problem to illustrate this process.

CASE REPORT

Mr. G was a 27-year-old married attorney who was referred because of intermittent impotence. He had been medically evaluated by his internist and a urologist some weeks earlier and no physical basis for the sexual dysfunction was found. The behavioral assessment of the clinical problem included interviews with

Mrs. G alone and with her husband in order to corroborate his account of the difficulty and to adequately assess the marital relationship in general.

The couple had been married 2 years earlier after a courtship of several years. Mr. G is a devout Catholic who had no coital experience prior to the marriage. Impotence was an occasional problem after a few months of marriage but only began to concern Mr. and Mrs. G greatly 6 months before they entered treatment. The patient's adjustment at work, in the community, and with friends seemed adequate, but he reported increasing tension and disagreements with his wife, particularly around the issue of his sexual limitations. He reported no other psychiatric symptoms aside from occasional excessive intake of alcohol.

Mrs. G was 29 years old, appeared more self-assured than her husband, and reported some coital experience with other men some years before their marriage. She usually had an orgasm in coitus with her husband if he maintained an erection long enough.

The couple agreed that impotence had become a frequent and major problem to them and their marriage since a particularly disturbing incident 6 months earlier during a skiing trip. They had hoped to spend a relaxing weekend alone together, but the patient drank excessively on both evenings and was unable to perform sexually afterward; a bitter argument followed. Mr. G's impotence was more severe from that time on. He recognized that these episodes caused him to lose self-confidence and he feared failure to perform sexually after this incident. Sometimes he drank intentionally to reduce his anxiety on an evening when sexual relations were anticipated, but the alcohol often seemed to limit his sexual capacity. They both recalled only three attempts at intercourse during the last 2 months; he avoided sex for fear of failure and she for fear of frustration.

This history is not uncommon in sexual impotence. A man with some historical evidence of sexual inhibitions and self-doubts becomes persistently impotent following a frank sexual failure, even though it occurred for more or less sufficient reasons (e.g., temporary impotence following excessive drinking). A vicious circle sets in after the episode. The fear of sexual failure inhibits sexual arousal and erection, confirming the man's fears and causing the problem to persist. The usual behavioral treatment consists of explaining this mechanism to the patient and his partner and assigning them to a program in which the pressure to perform up to some standard is minimized and the man gradually regains his self-confidence. The first few sexual occasions after treatment begins may consist simply of mutual nongenital fondling, some sessions of genital fondling may follow, and so on. The notion is that increasing sexual arousal in such nonthreatening preliminary encounters will inhibit anxiety responses and allow further arousal to occur. Coitus is not attempted until the man feels secure about maintaining an erection. This technique of in vivo desensitization has been described in detail by behavior therapists and sex therapists (6). Mr. and Mrs. G appeared to understand this procedure and were ready and willing to undertake it.

Because of an out-of-town commitment, I did not see the couple for two weeks, at which time they reported that the procedure had failed completely. They had delayed attempting the procedure for almost a week; then, contrary to my instructions, Mr. G reverted to drinking before the remedial session. Mrs. G—also in contradiction to instructions—did not stop at nongenital fondling but went on to very direct manipulation of her husband's penis and, despite a waning erection, urged him to attempt intercourse. Recriminations followed, and there was a repetition of this whole sequence several nights later. Failures of a particular technique in the course of behavioral therapy often provide essential additional data in the assessment of the clincial problem. With this couple, the failure suggested the need to obtain a wider range of clinical information, i.e., to learn more about the interpersonal context in which the sexual dysfunction was occurring. This required several more sessions of detailed history taking and, more important, direct observation of the couple interacting in my office. These latter sessions were tape-recorded with the couple's knowledge and then analyzed.

The analysis of the tapes revealed that Mrs. G was more directly assertive and active in the relationship—both in a positive, engaging way and in a negative way, making critical remarks and demands about the solution of problems and the differences between her and her husband. The negative aspect of this assertiveness predominated, as became particularly clear on examination of two sessions recorded in my office. She accounted for about 80% of the remarks the couple made, both positive and negative. During these two 45-minute sessions she interrupted her husband a total of 34 times and he interrupted her on 7 occasions. Another feature of their communication was easily quantified and revealing: the number of critical and pejorative remarks made by each compared with the number of positive or neutral comments. The ratio was about 5 to 1 for both Mr. and Mrs. G. When confronted with this preponderance of negative and critical remarks, documented by the tapes, both agreed after some discussion that approximately the same ratio had characterized their communications in other situations during the previous few months. The picture that emerged was that Mr. G's lack of self-confidence and assertiveness extended beyond the sexual situation to their relationship in general. He responded to their disagreements, sexual and otherwise, by being silent, emotionally aloof, and distant, especially when she nagged and criticized. She responded to these traits by being more critical of his aloofness and what she called "his sexual problem."

Another mechanism emerged that is not uncommon in problems of sexual inadequacy in marriage. There was a maladaptive behavioral chain in their interactions, i.e., a recurring sequence of responses to each

other, each response serving as a discriminative stimulus for the next response member and as a secondary reinforcer for the previous response member (7). In this chain, Mr. G would sense pressure from his wife to perform sexually later in the evening. He would prepare himself by drinking. Mrs. G would then call attention to his drinking, suggesting that he was not totally desirable in this state and implying that he might fail. He would then in fact fail to maintain an erection and she would indicate subtly that her prediction was fulfilled. When he failed sexually, he sometimes attempted to bring her to orgasm by manual stimulation of the clitoris. However, she often objected to this on the basis that it was "unnatural." The result was continued frustration for her, which further justified her being hurt and added to his feeling of being put down and inadequate. The following day he would be remorseful and placating, disagreeing little with her decisions and demands in other areas of their life. Thus, the pattern would be reinforced.

All elements of the chain would not occur on every occasion. For example, there were times when she would not capitalize on his remorseful attitude following a sexual failure but rather look to him to take a stronger, more "masculine" position. However, such a behavioral chain may be especially resistant to extinction if some of its members are reinforced intermittently.

This expanded analysis of the clinical problem indicated the need for some additional behavioral interventions. The first was assertive training, a common behavioral procedure in which the patient learns to be appropriately assertive through corrective instructions, role playing, behavioral rehearsal, and related techniques (8). As is often the case, Mr. G needed to be more assertive in the expression of appropriate anger as well as positive, emotional responses. He was encouraged, with Mrs. G's knowledge and, in time, help, to express more directly his anger at her frequent nagging, her tendency to be overly controlling, etc. It is the expression of anger rather than simply a verbal counterattack that is important, since the latter usually leads only to an escalation of hostilities. Thus, for example, if his wife would subtly allude to his sexual failures, Mr. G would respond with a statement such as, "You know that can only make me feel worse and aggravate the problem. Why don't you say and do something positive and supportive?" He was also deficient, however, in demonstrating positive verbal and nonverbal expressions of affection and interest, whereas she, despite her frequent nagging and critical remarks, did approach him warmly at other times. This assertive training extended over four sessions. The second procedure used was behavioral contracting (9), which is especially helpful with couples whose relationship is such that each attempts to satisfy his needs from the other by largely negative contingencies of reinforcement (e.g., nagging and social withdrawal). Clearly, this couple, despite their earlier very positive relationship, were now in this unproductive posture. In behavioral contracting, each person explicitly states what he wants from the other and then a more propitious exchange of positive reinforcements is arranged. In this case, Mr. G agreed not to drink when a sexual encounter was anticipated and to make a minimal number of positive verbal and nonverbal affectionate responses toward Mrs. G every day. As her part of the contract, she agreed not to express any negative expectations about his past, present, or future sexual performance and not to make unilateral decisions in everyday matters that were more important to him and are usually the prerogative of the husband in our culture. Finally, they both agreed that should he fail to maintain an erection they were to work together to bring her to orgasm by manual or other stimulation. In order to be maximally effective, such behavioral contracts must be literally written out and agreed to in the presence of the therapist, and the degree of compliance of each partner is reviewed and discussed at subsequent treatment sessions. In addition to the amelioration of specific conflicts, the process of negotiating compromises and of becoming better aware of the needs of the partner is of therapeutic value in itself.

The couple undertook these various procedures, and over a period of months the relationship in general improved. However, the impotence persisted, and anxiety was still attached to sexual performance. Hence, some 5 months after the initial assessment, the original treatment procedure, a program of graded stimulation, was begun again. In the new interpersonal context this treatment strategy was effective and the impotence improved greatly within a few weeks. I continued to see the couple at less frequent intervals over the next 6 months to monitor their use of these various behavioral procedures. Some minor relapses did occur but were easily remedied by reinstituting the behavioral procedures.

DISCUSSION

This case study is presented not to demonstrate the efficacy of behavior therapy—although a good clinical result was obtained—but rather to demonstrate the distinguishing features of a behavioral approach. One mechanism that contributed to the patient's impotence was that sexual cues (antecedent stimuli) were eliciting anxiety, which in turn inhibited sexual arousal. When an attempt to countercondition these anxiety responses by a course of in vivo desensitization failed, a wider range of environmental factors was considered and more clinical data were systematically collected. Additional variables, largely imbedded in the couple's relationship, that were operating to maintain the problem of inadequate sexual performance were identified. Some of these were antecedent events (discriminative stimuli) and other were consequences of specific behaviors (reinforcing stimuli). Additional behavioral procedures including assertive training and behavioral contracting were then employed.

One might ask whether a more extensive assessment of the presenting problem of impotence at the outset might have revealed the forces operating in the marital relationship that contributed to the maintenance of the problem. If this had been the case, the initial focus of treatment would have been the relationship. However, there are two reasons for beginning with the more sexually focused procedure. First, it is economical to try the least time-consuming strategy initially and to conduct a more extensive assessment and multifaceted treatment program only if the clinical problem is not quickly resolved. Second, the use of a highly focused behavioral procedure also provides a powerful diagnostic and motivational test. As in this case, it may quickly expose resistances to treatment so that other, related features of the total clinical problem can be identified, assessed, and appropriately treated.

One procedure used in this case—helping the patient to overcome anxiety-mediated sexual impotence by a step-wise program of increasing sexual activity—might have been used by a sex therapist of different orientation. However, the whole approach to this clinical problem was behavioral to the extent that the analysis was multivariate and empirical and treatment consisted of the systematic application of principles of learning to modify observable and quantifiable segments of behavior that have a functional relationship to the patient's sexual performance. Sex therapy is behavior therapy to the extent that it follows this paradigm, i.e., deals comprehensively with the environmental, interpersonal, and organismic factors maintaining the sexual problem. To the extent that sex therapy does not deal with all these factors, it is a limited approach to the treatment of sexual dysfunction.

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The Effects of the Sealed Record in Adoption

BY ARTHUR D. SOROSKY, M.D., ANNETTE BARAN, M.S.W., AND REUBEN PANNOR, M.S.W.

The authors found that 40 of 50 adult adoptees who had reunions with their birth parents found the experience satisfying. Only 10% of the birth parents reacted adversely, although negative responses were somewhat more common among the adoptive parents. These findings confirm the authors' belief that adoption practices, which in all but 4 states include permanent sealing of birth records, should be changed to recognize the life-long nature of adoption. Their recommendations include opening the records for adult adoptees, creation of agencies to be available to provide assistance and counseling for all involved (adoptees, their adoptive parents, and birth parents), and consideration of new adoption methods that would not require biological parents to forever relinquish their child and all knowledge of him/her at adoption.

MENTAL HEALTH specialists and adoption agencies are becoming aware of an increasing number of adult adoptees who are expressing questions and concerns about their genealogical background. Some have successfully searched for and experienced reunions with birth relatives from whom they have been separated since infancy. In the past, adoptees tended to suppress such feelings because of reluctance to hurt their adoptive parents or to intrude upon the privacy of their birth parents. This tendency was reinforced by adoption agencies' emphasis on the finality of the adoption process and by psychotherapists who viewed such interests in birth parents as indicative of underlying neurotic conflicts. In recent years, however, adoptees have organized into activist groups that have established a forum for the discussion of such issues and the provision of mutual support for searching for and encountering birth parents (1, 2). These activist groups are also in the process of bringing civil rights cases into the courts to test the constitutional legality of keeping the adoptee's original birth certificate sealed for life.

The sealed record is symbolic of a whole body of secrecy that grew over a long period of time when there was little self-criticism or evaluation by professionals in the field. Beginning in the late 1940s, laws were passed in most of the states requiring that information identifying birth parents be kept confidential and made available to adult adoptees only through special court order. At the present time, only Alabama, Arizona, Connecticut, and Kansas do not have such laws. Policies are quite different in Scotland (3), Finland (4), and Israel (5), where the legally emancipated adult adoptee, on production of evidence about himself, may have access to his original birth certificate. Also, in England and Wales the Children Act of 1975 provides that people aged 18 years and older may have access to their birth certificates after a mandatory interview with an adoption counselor and that people adopted after November 1975 may have access to their records after they reach 18 years without seeing a counselor.

The controversy over the statutes related to sealed records has aroused considerable interest within the legal profession. Katz (6) emphasized that the decision to give up a child for adoption is irrevocable and that the adoptive parent-child relationship assumes all the characteristics of a natural parent-child relationship. He agrees with Goldstein and associates (7), who believe that every effort should be made to safeguard the developing child's continuity of relationships and environmental influences. Other writers have attempted to weigh the rights of the adoptees as provided by the equal protection clause of the Fourteenth Amendment against the birth parents' and adoptive parents' constitutional rights to personal privacy (8–11).

It became clear to us after consulting numerous adoption agencies and legal experts that there was a need for a study to clarify many of these controversial issues and provide guidelines for the establishment of future adoption policy, both at the agency and court levels. It was our impression that the agencies were totally unprepared for the effect that a constitutional decision in favor of adoptees' rights to their original birth certificates would have on their attitudes and practices. Our research investigation, a collaborative effort between a psychiatrist in private practice and two experienced adoption social workers, began in late 1972.

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METHOD

Our investigation was greatly facilitated by a number of articles in the lay press that brought the issue of sealed records to the attention of large populations and requested interested readers to write in with their personal experiences and reactions. We then mailed questionnaires regarding the sealed record to all those individuals who responded to these requests and provided forwarding addresses. We arranged to interview those adoptees and birth parents who had already experienced a reunion. Unfortunately, this type of research does not lend itself to a careful scientific design with adequate controls. Furthermore, the study is limited by its dependence on individuals who had enough concern and interest to volunteer for interrogation and investigation. However, we felt that these obstacles should not deter our efforts to clarify issues of great concern to millions of people.

Although our initial research design focused on the sealed record and its implications, it soon became apparent that there was a need to reevaluate the institution of adoption and all of the concepts that had governed professional practice for so long. The sealed record was only the tip of the iceberg. Underneath the tip were many serious issues affecting the welfare of all members of the adoption triangle—adoptees, birth parents, and adoptive parents.

In a previous publication (12) we discussed our impression that adopted persons are vulnerable to the development of identity conflicts in late adolescence and young adulthood as an outgrowth of any of the following developmental difficulties: 1) disturbances in early object relations, 2) complications in the resolution of oedipal conflict, 3) prolongation of the "family romance" fantasy, and 4) "genealogical bewilderment." Interviews with hundreds of birth parents indicated that most of them seemed to be functioning well within marriage and as parents, but harbored deep emotional feelings and sharp memories of bearing and relinquishing a child for adoption (13, 14). Our discussions with adoptive parents revealed that many fear that a liberalization of the adoption statutes would result in a loss of their adopted child to the birth parents, even though there is no evidence to support these feelings (15, 16). It would appear that this anxiety represents a resurgence of the preadoption childless feeling of emptiness and the sense of inadequacy associated with infertility (17).

RESULTS

We reported previously (18) on our initial 11 cases of reunited adult adoptees and their birth parents. We have now expanded our survey to 50 cases. Our sample consists of 41 female and 9 male adoptees ranging in age from 20 to 77 (median=40), all of whom were adopted early in life by nonrelatives. Thirty-three (66%) had reunions with their birth mothers, 15 (30%) with both birth parents, and the remaining 2 (4%) with their birth fathers. In 32 cases (64%) additional contact was made with other birth relatives including siblings, cousins, aunts, uncles and grandparents. The adoptees ranged in age at the time of the reunion from 18 to 50 (median=31).

The decision to search for birth parents seems to have been precipitated by such factors as marriage, pregnancy or the birth of a child, N=18 (36%), death of the adoptive parents, N=7 (14%), genealogical concerns, N=9 (18%), late revelation of adoption, N=4 (8%), attaining adult legal status, N=1 (2%), the search for love and acceptance, N=2 (4%), exposure to publicity about the adoptee activist groups, N=4 (8%), and coincidental happenings, N=5 (10%). The length of the search ranged from a few days to 29 years, with a median of 11 months.

Forty-five (90%) of the adoptees were satisfied with the outcome of the reunion. Most reported a sense of closure, resolution of genealogical concerns, and diminished identity conflicts. Forty-one (82%) of the encountered birth parents were positive and accepting and only 5 (10%) reacted adversely to the reunion with their relinquished child. In contrast, many of the adoptive parents had difficulty initially adjusting to the experience. Eighteen (36%) of the adoptive parents were cooperative and understanding, 10 (20%) were mildly upset, and 5 (10%) were quite hurt. In the other cases the adoptive parents had either died or were not told about the reunion in order to spare them from possible pain.

It is interesting that 29 people (58%) discovered striking personality similarities and common interests with their birth relatives. Twenty-five (50%) of the adoptees developed meaningful relationships with their birth parents; 16 (32%) were satisfied to have only periodic contact following the initial visit. In 4 situations (8%) there was a very strained relationship following the reunion and in 3 (6%) there were no further contacts. In the final 2 cases, it is too soon to determine the outcome.

The data do not indicate that a poor relationship with the adoptive parents was a primary reason for making contact with the birth parents. Twenty subjects (40%) reported a good relationship with both adoptive parents and 15 (30%) described a good relationship with at least one of their adoptive parents. There was, however, a trend toward a late, disruptive revelation of the adoption in this group. The median age at which the group learned about their adoptive status was 7 years, but 12 (24%) found out after they were 12 years old. Sixteen (32%) of the adoptees learned about the adoption from persons other than their parents and 22 (44%) described the revelation as a traumatic experience. It seemed to make little difference as to how the adoption was arranged—approximately half of the cases were associated with agencies and the other half with private sources. It may be significant that 30 (60%) of the adoptees were raised as only children in their adoptive homes.

DISCUSSION

The statistical data and case histories of the adoptees who have successfully searched for their birth parents are in accord with our impression that adoptees are more vulnerable than nonadoptees to the development of identity conflicts in late adolescence and young adulthood. Many of these adoptees seem preoccupied with existential concerns and have a feeling of isolation and alienation resulting from the break in the continuity of life through the generations that their adoption represents. For some, the existing block to the past may create a feeling that there is a block to the future as well. The adoptee's identity formation must be viewed within the context of the life cycle, in which birth and death are linked unconsciously. This is evident in the frequency with which marriage, the birth of a child, or the death of the adoptive parents triggers an even greater sense of interest in the birth parents.

It would appear that very few adoptees are provided with enough background information to incorporate into their developing ego and sense of identity. This is often the result of a reluctance on the part of the adoptive parents to impart known information, especially of a negative nature, that might hurt the child. The adoptees, in turn, are often reluctant to ask genealogical questions because they sense their parents' insecurities in this area. Information given to adoptive couples at the time of adoption is scanty and usually descriptive of an immature, confused adolescent unwed mother and father. Adoptive parents are not provided with follow-up information as to what kind of people the biological parents have become 18 or 20 years later.

The desire for genealogical background information is probably shared by all adoptees, but it can become a burning issue for some, simply because they have bright, curious minds and approach all of life's mysteries in an intelligent, inquisitive manner; their search may have nothing to do with the quality of the adoptive relationship. This is not to say, however, that there are no adoptees who have an obsessive need to search for their birth parents because of neurotic problems or an emotionally barren relationship with their adoptive parents. We have encountered many adoptees who are perpetual searchers, always stopping short of a reunion. The search itself (along with the associated fantasies) is the significant process serving to hold their personalities together. It would appear that these individuals would almost prefer to live with their fantasies, a prolongation of the classic family romance theme, than to face the reality of a possibly disillusioning reunion with the birth parent.

The preponderance of only children in the sample suggests that a sense of loneliness and isolation in childhood may be another contributing factor in some of the cases. The trauma resulting from an uncomfortable or delayed revelation of adoption is yet another reason for the development of deep identity conflicts. What stands out most when we review the data, however, are the positive benefits the majority of the adoptees gain from the successful search. Few regretted the experience, and many were enriched by a new meaningful relationship with their genealogical forebears. More significantly, most reported a deeper sense of love and appreciation for their adoptive parents, whom they viewed as their true "psychological parents." Although some of the adoptive parents were upset and hurt by the reunion, permanent damage to the adoptive family relationship resulted in only a few cases. For the majority of the birth parents, the experience provided an opportunity to resolve old guilt feelings and to erase years of questioning about the fate of their relinquished child.

We believe it is time to reevaluate our current adoption policies in light of our new knowledge and awareness in this area. The premise that has governed the philosophy and practice in the field of adoption has been that the relinquishment of a child by his/her birth parents permanently severs all ties between them. Although the present standards of anonymity were developed as a safeguard to all of the parties involved in adoption, they may, in fact, have been the cause of insoluble problems.

We need to recognize that birth parents, especially mothers, have probably not resolved their feelings about giving up for adoption a child they have been told they can never see again. We must also recognize that adoptees may feel a greater lack of biological connection and continuity than has been realized in the past. Furthermore, the aura of secrecy has probably been more of a burden than a protection to adoptive parents. Adoption agencies have insisted that adoptees be told early and clearly about their adoption, yet they have provided little help to adoptive parents in dealing with the complicated feelings arising out of their adopted child's dual identity and they have not educated parents to understand and accept as nonthreatening their child's concerns and curiosity about genealogy.

It is our conviction that adult adoptees should have access to their birth records, if they so desire, when they reach the age of 18. In Scotland, Finland, and Israel this option has not been widely exercized by adoptees, and most of those who did obtain their records have been satisfied with the additional information provided, without feeling a need to search further. For those adoptees who are determined to find their birth parents, the information available in the original birth records may not be sufficient. In order to avoid situations wherein adoptees spend agonizing years and large sums of money tracking down trivial clues, we would support the idea of regional reunion registries, where adoptees and birth parents could express their interest in a reunion with the other.

In order for the registry to be efficient, it should operate in conjunction with a professional mediating and counseling board composed of mental health specialists (psychiatrists, psychologists, and adoption social

workers) and representatives from each sector of the adoption triangle—adoptees, adoptive parents, and birth parents. The board would provide necessary assistance and counseling to all persons involved in or affected by an adoption reunion. Whenever a request was made by either an adult adoptee or a birth parent, attempts would be made to contact the person sought. The board could also serve an arbitration function when one party desires a reunion and the other is resistant.

The role of the birth parents after the culmination of the adoption proceedings must be reconsidered. Birth parents have always had a more direct involvement with adoptive parents in private adoptions than in agency-arranged adoptions. There are healthy aspects to this policy that should be studied more carefully by adoption agencies. Allowing the birth and adoptive parents to meet one another at the time of the adoption enables both to assume a better reality position and diminishes the chances that either will have to resort to denial or projection to deal with the proceedings. We also feel that adoptive parents should be provided with continuing reports of the birth parents' welfare by the original adoption agency. The adoptive parents can use the information to answer their children's inevitable questions and thus minimize the chances that the adoptee will resort to excessive fantasizing in an attempt to fill in identity lacunae. Information should also be made available to the birth parents about their child's progress and development.

There are fewer babies available for adoption today as a result of improved contraception, liberalized abortion laws, and an increasing tendency for unwed mothers to keep and raise their children. In a previous presentation we discussed the concept of "open adoption," defined as "an adoption in which the birth parent meets the adoptive parents, participates in the separation and placement process, relinquishes all legal, moral and nurturing rights to the child, but retains the right to continuing contact and knowledge of the child's whereabouts and welfare" (19). This special type of arrangement, which should not be confused with opening the sealed records, would make a number of children available for adoption in those cases where the birth parents are unwilling to cut all ties to the child. Such an arrangement could never be expected to replace the traditional adoption, but it is our impression on the basis of the few open adoptions we have studied that it deserves serious consideration.

CONCLUSIONS

Professionals in the mental health field need to realize that past adoption practices have led to numerous psychological problems for adoptees, birth parents, and adoptive parents. Future adoption practices should address the continuing needs of individuals placed for adoption in the past and of their birth parents and adoptive parents, as well as develop a creative and open approach to meet the challenges of the future.

We recommend that the following changes be considered:

1. Opening the original birth records to adult adoptees and providing background and identifying information when requested.
2. Establishing appropriate agencies that would be available to intercede on behalf of those adult adoptees or birth parents who wish to effect a reunion.
3. Continuing commitment by adoption agencies to all members of the adoption triangle for as long as necessary, including the provision of viable, current information to any of these parties. This involves reestablishment and continuation of contact by the agency with the adoptive family and the birth parents.
4. Counseling services which recognize that adoption is a life-long process.
5. Consideration of new adoption alternatives to provide stable homes and families for children who would not be relinquished otherwise.

Above all, it is essential for us to realize that openness and honesty must replace the secrecy and anonymity that have prevailed in adoption practices. We hope that the controversy over sealed records, which has brought these issues to the fore, will enable us to develop sounder practices to meet both past and future needs of millions of people whose lives are touched by adoption.

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The Course of Development of Mania in Patients with Recurrent Depression

BY DAVID L. DUNNER, M.D., JOSEPH L. FLEISS, PH.D., AND RONALD R. FIEVE, M.D.

The authors attempted to assess the extent to which bipolar patients are misdiagnosed as unipolar by evaluating the development of mania in patients who had recognized bipolar illness and by means of follow-up data on patients who had recurrent depressions. Mania occurred early in the course of bipolar illness: almost 80% of the bipolar patients were initially hospitalized for mania. Follow-up data and theoretically based calculations suggest that the chance of a patient with recurrent depressions becoming bipolar is about 5%. Based on these findings, the authors make suggestions for the classification of unipolar patients.

IT HAS BEEN SUGGESTED that patients with affective illness can be separated into at least two groups—bipolar (those patients with depression and mania) and unipolar (those patients with depression only). This classification system was initially proposed on clinical grounds and later supported with data from genetic, biological, and pharmacological studies of depression (1).

The criteria for bipolar affective illness can be generally agreed upon because mania is such a distinctive feature of the illness. However, there is less agreement among researchers as to which patients should be diagnosed as unipolar. For example, Perris (2) included in his studies only those patients who had had three episodes of depression, whereas Angst (3) and Winokur and associates (4) included as unipolar those patients who had had only one depressive episode. Furthermore, studies from the National Institute of Mental Health and the New York State Psychiatric Institute (5, 6) have supported the separation of patients with depression and hypomania but not mania (bipolar II) from both unipolar and other bipolar (bipolar I) patients.

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The reason for the concern about diagnostic precision in the affective disorders is the need to define populations of greater homogeneity for clinical, genetic, and biological studies. Since some patients classified as unipolar or bipolar II may have a tendency to develop mania during the course of their illness (i.e., to become bipolar I), data regarding unipolar and bipolar II patients may not apply to truly homogeneous populations.

In this report we present data from our clinic regarding the development of mania in bipolar I patients whose initial affective episodes were depressions. The data are used to estimate the degree of heterogeneity in samples of patients with affective disorders.

METHOD

The research and clinical records of over 500 patients who had attended the lithium clinic at the New York State Psychiatric Institute as of January 1, 1974, were reviewed for diagnosis and clinical course. In order to be included in this study as bipolar I subjects, patients had to meet the criteria of Feighner and associates (7) for primary affective disorder and had to have been hospitalized at least once specifically for a manic episode. (We included in our bipolar I group patients Perris [2] classified as "unipolar manics.") In addition, the patients' records had to be sufficiently detailed to determine their age at first hospitalization and the dates and characteristics of subsequent affective episodes. The cohort thus included patients eventually diagnosed as bipolar I but who might have been diagnosed as unipolar or as bipolar II at the time of their initial hospitalization.

Our criteria for a diagnosis of bipolar II illness were 1) primary affective disorder according to the criteria of Feighner and associates (7); 2) hospitalization for depression; 3) periods of hypomania of longer than 2 days' duration, characterized by euphoria and two other symptoms (including hyperactivity, pressured speech, flight of ideas, grandiosity, decreased sleep, and distractibility); and 4) no hospitalizations for hypomania. Our criteria for a diagnosis of unipolar illness were 1) primary affective disorder, 2) at least one hospitalization for depression, and 3) failure to meet the criteria for hypomania described for bipolar II patients.

Data from the following two patient groups are presented: a retrospective study of 152 bipolar I patients

and a prospective study of 102 bipolar II and unipolar patients. The 152 bipolar I patients were obtained after excluding 21 other bipolar I patients whose records regarding initial hospitalization and subsequent course were not sufficiently clear for their inclusion in this study. Two of the 152 patients were diagnosed as bipolar II at the time of their initial attendance at our clinic and were hospitalized for mania during their clinic treatment. The remaining 150 patients were diagnosed as bipolar I at their initial clinic attendance on the basis of their histories. The 102 patients who were diagnosed as either recurrent unipolar depressives (N=31) or bipolar II (N=71) when first seen in the lithium clinic were treated in the clinic for varying periods of time (from 6 months to over 5 years).

Data were analyzed using the life table method, with follow-up beginning with the index hospitalization and continuing until the patient was hospitalized for mania. Bayes' theorem (8) was then applied to estimate the proportion of a sample of putative unipolar patients who were actually bipolar.

RESULTS

Retrospective Data

Table 1 presents some characteristics of the bipolar I patients. There was no significant male/female difference for the 152 bipolar I patients with respect to whether the first hospitalization was for a manic or depressive episode. The initial hospitalization represented the onset of affective disorder in about two-thirds of the cases. That is, about one-third of all patients reported treatment for or symptoms of hypomania or depression 6 months or more before their first hospitalization. An onset of mania versus depression did not differentiate patients as to whether the hospitalization represented their onset of illness or not. The mean age of onset (initial hospitalization) was about 30 years for both men and women and for those hospitalized first for mania and for depression.

The initial hospitalization for 107 patients was for treatment of a manic episode. An additional 13 patients were initially hospitalized for depression and became manic while hospitalized or were discharged and soon thereafter rehospitalized for mania. Thus 79% of the sample of patients who were eventually hospitalized for mania (bipolar I) could have been diagnosed as bipolar I at the time of the completion of the affective attack that led to their initial hospitalization.

The remaining 32 bipolar I patients were initially hospitalized for depression and may have had histories of intervening depressive episodes before being hospitalized for mania. Such patients would have been diagnosed as unipolar or bipolar II before their hospitalization for mania, at which time they would have been rediagnosed as bipolar I. The life table analysis (figure 1) shows that all of these patients had been hospitalized for mania within 28 years of their initial hospitalization for depression; their probability of being hospitalized for mania within 10 years of their initial hospitalization was 0.84.

TABLE 1
Characteristics of the Bipolar I Sample

Item	Number	Age		Age of Onset	
		Mean	SD	Mean	SD
Initial hospitalization for mania					
Men	70	41.8	13.1	30.5	11.6
Women	50	43.5	11.0	30.0	9.5
Later hospitalization for mania					
Men	13	45.8	14.7	34.8	13.5
Women	19	44.5	9.9	29.3	8.6

Cumulative data regarding intervening episodes of depression from the time of initial hospitalization for depression until the first hospitalization for mania are presented in figure 2. The probability that the next affective episode would be a manic attack leading to hospitalization was 0.44, and the probability of being hospitalized for mania before four intervening episodes of depression had occurred was 0.94.

The cumulative probabilities in figures 1 and 2 apply to the 21% of all bipolar I patients whose initial hospitalization was for depression only. The values must therefore be multiplied by 0.21 in order for them to apply to the bipolar I sample as a whole. Even then, the results are not in a form that is directly applicable to estimating the degrees of heterogeneity in variously defined samples of unipolar patients. What is needed is an estimate of the proportion of patients, out of all of those who will ultimately become bipolar I, who will first suffer a specified number of depressive episodes.

In appendix 1 some estimates are derived of the degree of heterogeneity in variously defined samples of unipolar patients. The degree of heterogeneity is 5% or lower whether we take either one or two as the minimum number of depressive episodes in defining unipolar illness.

Prospective Data

During the period of direct follow-up of the 102 bipolar II and unipolar patients in our clinic, 2 of these patients, both bipolar II, were hospitalized for mania. One patient became bipolar I in the first year and the second patient in the second year of direct observation. The probability of converting to bipolar I, using the life table method, was 0.04 through the second year. Twenty-five of the original 102 patients were followed into the third year without developing a mania that required hospitalization.

DISCUSSION

The ideal determination of the development of mania in a depressive population would entail a prospective follow-up of a large number of patients who

FIGURE 1
Probability of Being Hospitalized for Mania for 32 Patients Who Were Initially Hospitalized for Depression and Followed Over Time

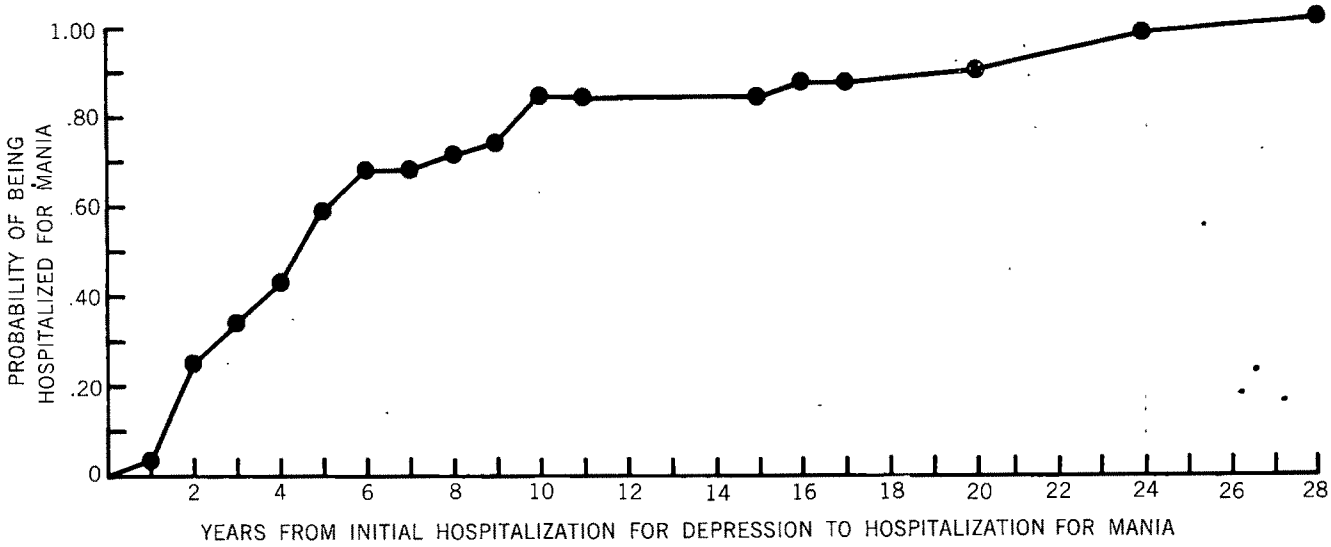
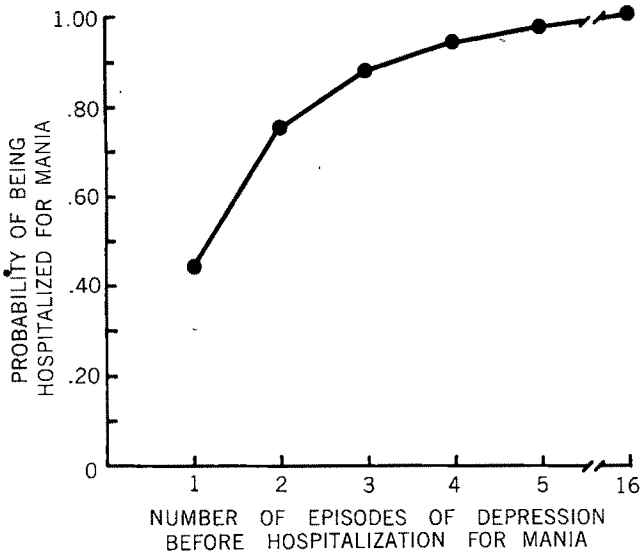


FIGURE 2
Probability of Being Hospitalized for Mania for 32 Patients Who Were Initially Hospitalized for Depression and Followed Through Other Depressive Episodes



entered the study at the time of their initial depressive episode. This cohort should be representative of the relative population frequencies of bipolar and unipolar disease, and the length of follow-up should be of sufficient duration that the vast majority of patients who will develop mania will have the opportunity to do so. Furthermore, the patients should not receive chronic medication, such as lithium carbonate or tricyclic antidepressants, which may alter the natural course of illness.

Given that this ideal study cannot be accomplished under present circumstances, one is left with a variety of retrospective designs to answer the question of how many depressive episodes should be required before reasonable certainty can be given to a diagnosis of unipolar illness. We have approached this problem by studying a large number of patients who were known to have bipolar illness (bipolar I). Seventy-nine percent of these patients were bipolar at the time of their initial hospitalized episode, which represented the onset of their illness in two-thirds of the cases. The remaining 32 patients were initially hospitalized for depression and later for mania. The probability of their being hospitalized for mania is a function of both time and the number of intervening episodes of depression. The data from these 32 patients suggest that the vast majority developed mania within 10 years of their initial hospitalization or before having experienced three subsequent episodes of depression. Thus severe mania tends to occur early in the course of bipolar illness.

The probabilities derived from the retrospective data for the bipolar I series correspond well to the prospective data for the bipolar II and unipolar series as well as to the data from the "Iowa 500" series (9). In our own prospective data, the probability of developing mania was 0.04 over a 2-year period for 102 patients who initially presented with recurrent unipolar or bipolar II illness. Furthermore, since the 2 patients who developed mania were bipolar II rather than unipolar, the exclusion of patients with histories of hypomania from samples of unipolar depressive patients would seem to produce greater homogeneity of the unipolar depressive population.

Winokur and Morrison (9) reported the results of a follow-up study of 225 depressive patients from the "Iowa 500" series. Nine of these patients showed signs of mania during the course of a follow-up of from 1 month to 20 years, and 8 of them had a manic episode within 3 years of their index admission. The authors

concluded that the chance of patients diagnosed as unipolar later becoming bipolar was less than 5%, a value we have confirmed.

Thus, based on the data from the course of development of severe mania in a bipolar population, we suggest that the probability of a unipolar depressive group being "contaminated" with patients who will later develop bipolar illness is small and can be further reduced by excluding those patients who have had hypomanic episodes. We also suggest that patients not be considered unipolar until they have been followed for about 6 months after their initial depressive hospitalization to ensure that this episode is not a pre-manic-depressive attack. Although we agree with Perris that patients with three depressive episodes are less likely to develop mania than patients who have had fewer attacks, the degree of homogeneity attained by employing this criterion seems to be outweighed by the loss of sample size necessary to achieve the criterion of three episodes.

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APPENDIX 1
Method for Estimating the Degree of Heterogeneity in Samples of Unipolar Patients

The cumulative probabilities in figures 1 and 2 apply to the 21% of all bipolar I patients whose initial hospitalization was for depression only. The values must therefore be multiplied by 0.21 in order for them to apply to the bipolar I sample as a whole. Even then, the results are not in a form to be directly applicable to estimating the degrees of heterogeneity in variously defined samples of unipolar patients. What is desired is P (BPI/k): the proportion of patients, out of all of those who have suffered k or more consecutive depressive episodes with no intervening manic episodes, who will yet suffer a manic episode (i.e., become bipolar I). The data at hand provide the converse probability of P(k/BPI): the proportion of patients, out of all of those who will ultimately become bipolar I, who will first suffer k or more depressive episodes. P (k/BPI) is found by multiplying 0.21 by the complement of the probability in figure 2 corresponding to k-1.

Bayes' theorem provides a solution to the problem. Let P (k/Other) denote the proportion of patients, out of all of those who do not ultimately become bipolar I, i.e., remain unipolar or bipolar II, who will first suffer k or more depressive episodes, and let p denote the proportion of the present and ultimate bipolar I patients in the population of patients with primary affective illness. By Bayes' theorem,

$$P(BPI/k)=\frac{P(k/BPI)p}{P(k/BPI)p + P(k/Other)(1-p)}$$

Perris (2) found that about 20% of hospitalized affectively ill patients had bipolar illness (bipolar I illness according to our definition), so we can set $p=0.20$ and $1-p=0.80$. To our knowledge, good estimates are not available of P (k/Other) for values of $k>1$; for $k=1$, this probability is obviously 1.00.

We can make some estimates of the degree of contamination, i.e., P(BPI/k), in variously defined samples of unipolar patients for some reasonable values of P(k/Other), the proportion of nonbipolar I affectively ill patients who suffer k or more depressive episodes.

If $k\geq 1$, $P(k/Other)=1.00$ and $P(BPI/k)=0.050$.
If $k\geq 2$, $P(k/Other)=0.60$ and $P(BPI/k)=0.047$.

It is clear that the degree of contamination is low no matter what minimum number of depressive episodes we take in defining unipolar illness.

Linguistic Performance in Vulnerable and Autistic Children and Their Mothers

BY SHELDON M. FRANK, M.A., M.D., DORIS A. ALLEN, ED.D., LORRAYNE STEIN, AND BEVERLY MYERS

The authors studied the language patterns of schizophrenic mothers and their 4-year-old children, and compared them with the speech of normal mothers and children and normal mothers with autistic children. They found that children of schizophrenic mothers showed lags in language development and language distortions less severe than but in some ways similar to those seen in autistic children. Schizophrenic mothers were more likely to produce more deficient and/or distorted language in interactions with their children. Mothers of autistic children produced language that was equal to or above that of mothers of normal children on most parameters and adjusted their language to the chronological rather than the linguistic age of the child.

EVIDENCE OF LINGUISTIC aberration in schizophrenic patients has been compiled from the time of the earliest clinical literature on this disorder. Broadened and refined investigation of language in schizophrenia continues in the work of such psycholinguists as Chaika (1), who found that many schizophrenic patients fail to make specific semantic and syntactic distinctions.

The increasing study in recent years of the role of the family in schizophrenia has included important findings on language and communication. Wynne (2) found high "communication deviance" scores in the fathers and mothers of adult schizophrenic and normal groups. These scores included variables pertaining to communicative intent, logic, semantics, and syntax.

Goldfarb (3) found that mothers of patients with childhood schizophrenia were poorer instruction-givers to their children than mothers of normal children; they were less responsive and provided sparser and more ambiguous information. His work has focused on childhood schizophrenia, which shows particularly strong and characteristic language deviations. This focus has been carried further by Shapiro (4), who found a predominance of echoing and of distorted, underdeveloped morphological and communicative parameters. The implications of Wynne and Goldfarb's work on the etiological nature of deviant parental communication in childhood schizophrenia are not supported by recent work by Howlin and associates (5, 6), whose preliminary findings showed that language of parents of autistic children is similar in communicative style to that of parents of nonpsychotic aphasic children.

Recent nonclinical psycholinguistic research has also focused on family communication while examining the normal process of language acquisition. In the late 1960s one of us (S.M.F.) collaborated with Alfred and Clara Baldwin and their associates on work in this area (7–9). We found that mothers adjust their language when speaking to their preschool child to a level much less complex than the one used in speaking with other adults but slightly more complex than the language level of the child. As measured both by MLU (mean length of utterance, in words) (10) and other linguistic parameters (11), the mother's complexity level rises with the rising level of the child from age 2½ to 5 years, remaining at what we have called a "syntactic distance," which diminishes slightly with the child's age.

This is shown in figure 1, which also illustrates how much a mother simplifies her speech when addressing her child instead of another adult; her MLU falls from 12.0 words to 3.7 words. Snow (12), Clarke-Stewart (13), and Nelson (14) have also found that mothers regularly modulate their language according to the child's level of language development.

The data of Baldwin and Frank (7) and others (15–20) have led to a special focus on question-response behavior as an important aspect of normal mother-child

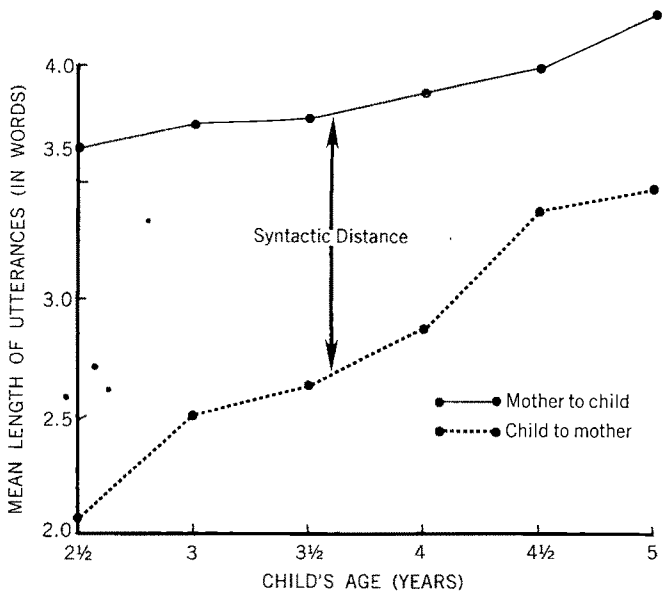
Revised version of a paper presented at the 128th annual meeting of the American Psychiatric Association, Anaheim, Calif., May 5–9, 1975.

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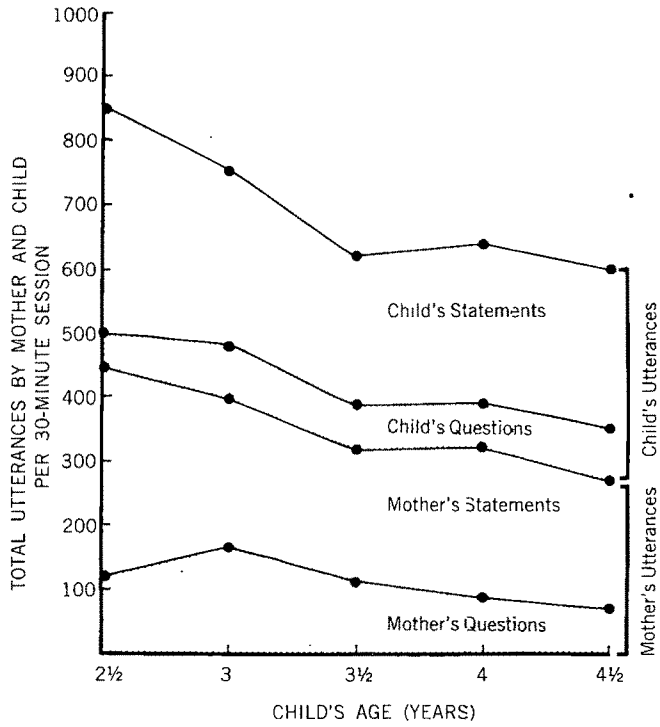
The authors would like to thank Carolyn Goodman, Ed.D., and her staff at the Bronx Psychiatric Center Parent and Child Education Program for referring subjects for this study.

FIGURE 1
Language Complexity of Normal Mothers* and Children**



*The mean length of utterance of a mother speaking to another adult is 12.0.
**Based on data presented more fully in (7–9).

FIGURE 2
Number and Types of Utterances by Normal Mothers and Children*



*Based on data presented more fully in (7–9).

interaction. In general, verbal interaction between mothers and their very young children (2 to 2½ years) consists of questioning, labeling, behavioral instructions, fantasy, and talk about the child's immediate desires.

As seen in figure 2, the mother dominates the interaction to the degree of contributing about 60% of the dialogue. By the time the child reaches its fourth year, the dialogue becomes more balanced, with the child contributing nearly 50%. More time is spent on communication of specific and general information and more on past and future as well as present circumstances. Fantasy diminishes as a focus. Questions are still an important means of interaction, but comprise only about one-fifth rather than one-third of the dialogue, and increasingly take on a more distanced and complex character.

When the child is 2½, most questions are of "Wh-type," comprised of "what," "who," "where," and similar questions. Within this Wh-type, the questions are predominantly ostensive, that is, they seek the label of a concrete object that is present. The interaction between a 4-year-old child and its mother contains a greater proportion of predicative questions. These deal with more complex issues such as manner, time, and cause (e.g., "how," "when," and "why") and are constructed in a more abstract manner, with the object not necessarily at hand.[1]

Our present work, a psychiatric-linguistic collaboration, attempts to study with linguistic sophistication families in which a parent is schizophrenic and a child is in the early stages of language development. We wanted to assess language development in a situation in which mother-child communication may be deviant and there is the possibility of prospective study of linguistic and psychological precursors of schizophrenia. We hypothesized that many vulnerable children would show quantitative and qualitative differences from the norm in language development and that related deviant qualities would be found in the parental language. Specifically, we predicted that vulnerable children would show lags in the development of syntax, questioning behavior, and responding behavior, and that their parents would fail to provide well-modulated norms in those aspects. We were also curious to see whether any deviant patterns would resemble those found in autistic children, the most linguistically deviant of "childhood schizophrenics."

We have concentrated on mothers who are schizophrenic simply because we were primarily referred subjects who were offspring of schizophrenic mothers, not fathers; certainly father-child communication deserves equally serious study.

METHOD

The data reported in this paper were collected as part of a longitudinal study of chronic schizophrenic

[1]These distinctions are more fully elaborated in reference (21), which discusses concepts proposed by Allen (20).

mothers and their preschool children. All of the mothers were outpatients living with and actively caring for their children. However, 7 of the 8 mothers studied had had inpatient care when their children were between 18 and 31 months of age, and all were being maintained on moderate doses of phenothiazine medication. All were native speakers of some dialect of American English and were of working class or welfare class status. Six of the 8 families had a father present in the home. The mean age of the children in this "vulnerable" group was 4 years.

A control group consisted of 8 normal mother-child pairs studied in an earlier collaboration (7, 8). This group was equivalent to the vulnerable group in socioeconomic class and age, and nearly identical in other characteristics.

A third group of 11 autistic children and their mothers was also studied. These families were of a slightly higher socioeconomic status but were otherwise comparable to the other groups. Diagnosis of autistic symptoms prior to age 2 was necessary for inclusion. The children were outpatients who could profit from a part-time therapeutic nursery and most had language abilities which placed them at the highly functioning end of the autistic spectrum.

All the mothers and their children were studied in a naturalistic playroom setting equipped with a standard set of toys including a doll house, books, puzzles, ring toss, and a toy telephone. The mothers were instructed to act with their children as they might at home. All 30-minute sessions were recorded on both audio and video tapes.

The tapes were transcribed to show all verbal interchanges between mothers and children as well as the nonlinguistic context in which each verbal exchange took place. In a preliminary analysis of the data, we looked at the following parameters for mothers and children in each of the three groups:

1. *Total number of utterances,* with proportion contributed by each member of the dyad.

2. *Mean length of utterance (MLU),* in number of words (10).

3. *Number of transformations.* (A measure of linguistic repertoire consisting of the number of different rules used in forming sentences more complex than a simple declarative statement—e.g., a question, a negation, a sentence with a conjunction [22].)

4. *Relationship of mother's to child's language:* a) "syntactic distance" (the difference between mother's and child's values in MLU's and number of transformation, and b) correlation coefficients between mother's and child's values on these parameters (ρ and Spearman rank order).

5. *Questioning behavior:* number and types of questions employed, and time orientation (now versus not now).

6. *Responding behavior:* proportion of "good responses" (appropriate to the nature of the question) and of nonresponses to the other's questions.

RESULTS

Linguistic Production in Vulnerable Children

The vulnerable children spoke less than did the normal group (see table 1). Although the percentage contributed by the child was not significantly lower, we observed a much wider range in this group, including 3 mother-child pairs who showed patterns of nearly total silence, overwhelming mother-dominated (76%) interaction, or overwhelming child-dominated (85%) interaction. (None of these patterns was seen in the normal group.) The trend in the remaining dyads was toward a stronger-than-normal mother dominance for this age. The vulnerable children's language had shorter MLUs and significantly fewer transformations than the normal children's. Moreover, language stages, calculated according to Brown (10), were one to three levels below normal in all but 1 child. These language levels, estimated to be about one year behind normal, may even be overestimated because of the children's tendency to overemploy a small number of transformational types.

Linguistic Production in Schizophrenic Mothers

Table 2 shows that these mothers spoke only slightly less frequently to their children than did the normal group, but that their structural level was significantly simpler. Thus it appears that they simplified their language when speaking to their developing (and language-deviant) children. However, a look at the values measuring syntactic distance shows that they may have exaggerated the optimal modulation and provided too little syntactic distance between themselves and their children. A clue that their children at this age may be especially sensitive to the language model provided appears in the right-hand portion of the table. Whereas in the vulnerable group there is a significant tendency for an individual child's complexity level to correlate directly with the mother's, this is not true for the normal group at this age.

Questioning Behavior of Vulnerable Pairs

As seen in tables 3 and 4, mothers in the vulnerable group tended to ask fewer questions per half hour than normal mothers, and their children asked about half as many as those in the normal group. Both mothers and children asked relatively few questions of the complex predicative form. The right-hand column combines mothers' and children's questions in considering their time character: more than 16 times as many of the normal group's questions involved past or future time. Moreover, only 1 of the vulnerable dyads engaged in fantasy interaction, and that mother-child pair did little else.

Responding Behavior of Vulnerable Pairs

As measured by our parameters of "good responses" and "nonresponses," there seemed to be no differences on means between mothers in the vulnerable and normal groups. There were trends toward

TABLE 1
Language of Normal, Vulnerable, and Autistic Four-Year-Old Children

Measure	Normal Children (N=8)	Vulnerable Children (N=8)	Significance*	Autistic Children (N=11)	Significance*
Mean number of utterances per 30-minute session	284	210	p<.05	184	p<.10
Mean percent of total (mother and child) utterances	46.1	44.6	n.s.	32.1	p<.10
Mean MLU	2.88	2.65	n.s.	2.07	p<.01
Mean number of transformation types	15.3	10.6	p<.05	6.7	p<.01

* Compared with normal children; two-tailed t test.

TABLE 2
Language of Normal Mothers, Schizophrenic Mothers, and Mothers of Autistic Children

Measure	Normal Mothers (N=8)	Schizophrenic Mothers (N=8)	Significance*	Mothers of Autistic Children (N=11)	Significance*
Mean number of utterances per 30-minute session	329	283	n.s.	351	p<.10
Mean percent of total (mother and child) utterances	53.9	55.4	n.s.	67.9	p<.10
Mean MLU	4.11	3.43	p<.05	3.74	n.s.
Mean number of transformation types	24.3	14.6	p<.01	20.3	p<.10
Syntactic distance from child					
In MLUs**	1.23	0.78	n.s.	1.67	n.s.
In number of transformation types***	9.0	4.0	p<.05	13.6	p<.05
Correspondence of mothers' and children's MLUs					
Correlation coefficient	.33	.64	p<.10	.71	p<.05
Rank order coefficient	.07	.64	p<.10	.56	p<.10

* Compared with normal mothers; two-tailed t test.
** Mean MLU of mothers minus mean MLU of children (see table 1).
*** Mean number of transformation types used by mothers minus mean number used by children (see table 1).

fewer good responses and more nonresponses in the vulnerable children.

Parameters in the Autistic Group

As we might expect, there was a significantly lower quantity and complexity of language production in the autistic children (see table 1). Their mothers, as shown in table 2, showed a trend toward an increased amount of verbal production. The mothers' complexity level looks lower than that of the normal group, but they provided a higher than normal amount of syntactic distance. That is, despite the low absolute level of complexity, their language is pitched at a relatively higher level in relation to their children's language. We found mothers' and children's language complexity to be highly correlated.

In their questioning (table 3), mothers of autistic children showed high values of total Wh questions but normal levels of Wh-predicative questions. Their children were below normal in both of these categories. The joint value for time character shows an overwhelming predominance of present time context. There is also equal to superior responding behavior by mothers of the autistic group, with many good responses and few nonresponses. Their children are dramatically deviant from normal levels on both measures, with directions reversed from those of their mothers—namely, few good responses and an extremely high level of nonresponses.

DISCUSSION

We have seen a lag in and distortion of language production in the group of 4-year-old children of schizophrenic mothers. Quantitatively, the abnormalities were always less than those seen in autistic children, but in the same direction from normal values. Qualitatively, none of the frequently seen autistic features (reversal of pronouns, lack of a vocative term for mother, echoes, abnormal prosody) was present, except in one child later diagnosed as schizophrenic. Neither were

TABLE 3
Questioning and Responding Patterns of Mothers in Normal, Vulnerable, and Autistic Mother-Child Pairs

Item*	Normal Mothers (N=8)	Schizophrenic Mothers (N=8)	Significance**	Mothers of Autistic Children (N=11)	Significance**
Questions					
Number	78.5	67.8	n.s.	100.9	n.s.
Percent of total utterances	24.8	24.3	n.s.	31.0	n.s.
Number of Wh questions	30.5	27.1	n.s.	45.0	p<.10
Number of predicative Wh questions	19.1	11.1	p<.10	17.3	n.s.
Percent of "not-now" questions	8.3***	0.5***	p<.01	0.4	p<.01
Responses					
Percent of good responses	44.7	42.3	n.s.	63.3†	n.s.
Percent of nonresponses	25.0	27.6	n.s.	18.3†	n.s.

* Mean per 30-minute session.
** Compared with normal mothers; two-tailed t test.
***Joint mother-child value.
†N=7 for these variables.

TABLE 4
Questioning and Responding Patterns of Children in Normal, Vulnerable, and Autistic Mother-Child Pairs

Item*	Normal Children (N=8)	Vulnerable Children (N=8)	Significance**	Autistic Children (N=11)	Significance**
Questions					
Number	64.8	34.2	p<.10	28.3	p<.10
Percent of total utterances	22.9	17.0	n.s.	12.2	n.s.
Number of Wh questions	27.4	22.5	n.s.	20.3	n.s.
Number of predicative Wh questions	19.0	4.4	p<.05	2.3	p<.01
Percent of "not-now" questions	8.3***	0.5***	p<.01	0.4	p<.01
Responses					
Percent of good responses	52.3	41.9	n.s.	25.6	p<.01
Percent of nonresponses	24.9	35.3	n.s.	43.8	p<.10

* Mean per 30-minute session.
** Compared with normal children; two-tailed t test.
*** Joint mother-child value.

there any of the gross abnormalities seen in adult schizophrenia, such as word salad, clang associations, or the poetic linguistic devices mentioned above. Despite the quite obvious qualitative differences between the language of the vulnerable and autistic children, both manifested such features as rigidity, perseveration, stereotypy, and restriction of repertoire and context. Examples of these traits were seen in one mother-child pair who exchanged a set of three or four questions and responses about the price of a toy ("How much?"; "Thirty-eight cents."; "Is that thirty-eight cents?") for a major portion of their 30-minute session.

A major feature of the vulnerable group was the presence of these abnormal qualities in the communicative language of the mothers as well as that of their children. Whereas a normal group mother might ask elaborate ostensive questions such as "Who is that little boy riding on the truck?" and rephrase the question if not answered, the schizophrenic mother would ask a simple "What's this?" and turn to a different object and question if not responded to. Furthermore, fully one-third of the times a schizophrenic mother asked a question she did not allow the child time to respond; she looked away, changed the subject, or asked further questions. The fact that our response categories in their present form do not yet measure this tendency, as well as a qualitatively different "feel" to responses in the vulnerable group, has led us (in other work in progress) to subdivide the global categories of good response and nonresponse into measures such as appropriateness, correctness, and no time given for response. We will test our hypothesis that vulnerable and normal groups are farther apart on some of these more specific parameters. Despite the limitations of the present global categories, however, some striking differences were seen.

Subsequent to this study, one child in the vulnerable group was independently diagnosed as schizophrenic. In retrospect, we found that her mother had had the highest percentage of nonresponses (49%), and had asked the highest percentage of Wh questions (61%);

however, she also asked the lowest percentage of Wh-predicative questions (19%)—i.e., more than four-fifths of her Wh questions were requests for a label. Her child's language level, typical for the vulnerable group, did not warrant this simplicity. In this case and others, we may add infantilization and lack of mother-child coordination to the abnormal psycholinguistic qualities seen in the vulnerable group. Our preliminary conclusion about this child and others of her group is that she is being given a deficient, distorted, and mismatched language model by the mother, which contributes to her own developing language deficiency.

The group of mothers of autistic children showed, by contrast, a normal to superior level in all parameters studied. Typical of these were good responses, in which 5 of 7 mothers scored over 70%, and syntactic distance, in which 9 of 11 pitched their language to a level one or two words higher than their children's level of language complexity. It is interesting that the 2 mothers who were outside this range—one lower, one higher—also had the fewest good responses. By comparison, 5 of 8 mothers in the vulnerable group had fewer than 44% good responses, and 6 of 8 had less than one-word syntactic distance. The only 2 mothers who made 100% good responses were both in the autistic group. Both a didactic aim and a pitch at the chronological—rather than the linguistic—age of the child can be concluded both from these results and from observer impressions of their interactions.

In our preliminary analysis of the autistic group, we see the high mother-child complexity correlation as comprised largely of the mother's "tuning-in" to her developing child, just as we feel that much of the high mother-child correlation in the vulnerable group was a result of the child's tuning-in to the mother. That the mothers in the autistic group did not pitch their language level quite as low in relation to their children's as normal group mothers is probably due to a "floor effect." That is, an adult cannot readily simplify her language below a certain natural lower limit if she is to say anything substantial. Therefore it would seem to be a combination of the adult's floor effect and the autistic child's extremely low MLU that accounts for the greater syntactic distance in the autistic group.

Among other possible sources of variance that need to be further explored are the following: 1) the heterogeneity of both abnormal groups, especially the autistic children, who have a verbal, questioning subgroup and a very silent subgroup; 2) the socioeconomic status of the autistic group, which is higher than that of the others; 3) the early mother-child separation due to mother's illness in the vulnerable group; 4) the influence of phenothiazine medication on communication; and 5) the effect of mental illness in general, rather than schizophrenia in particular, on family communication.

Longitudinal and statistical extension of our study should clarify and may modify our preliminary conclusions and their scope. Although the communication patterns in both experimental groups are at variance with those of the normal mothers and children, there are differences between the two disturbed populations as well as similarities. Mothers of autistic children function linguistically more like normal mothers than like schizophrenic mothers on most variables, in spite of the fact that their children are very deviant. That they adjust to their children's chronological rather than linguistic age has been noted. We cannot disprove that this is inappropriate rather than beneficially didactic, but it is striking that other studies, as well as these preliminary findings, indicate that mothers of autistic children are not schizophrenic in behavior or diagnosis, and, more important, that schizophrenic mothers do not appear to produce autistic children. This suggests the need for considerable reevaluation of the nature, etiology, and sequelae of communication disturbances in families in which one or more members is psychotic if our work is to have diagnostic and clinical relevance to psychiatry.

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The Isaac Ray Award

The American Psychiatric Association invites nominations for the Isaac Ray Award for 1977. This award, in memory of Margaret Sutermeister, is presented to a person (psychiatrist, attorney, or someone from a discipline related to human behavior) who has made outstanding contributions to forensic psychiatry or to the psychiatric aspects of jurisprudence. The purpose of this award is to promote better understanding between the law and psychiatry. The award, which will be presented at the Convocation of Fellows at the Annual Meeting of the American Psychiatric Association in Toronto, Canada, in May of 1977, includes an honorarium of $2,000. The recipient agrees to present his or her work at an institution of higher learning (or other suitable location) and to present the manuscript for publication. The presentation will be located and timed to give maximum exposure to students and practitioners of law and medicine and to other professionals.

Nominations are requested by the deadline of October 1, 1976, from any interested professional, and may be submitted to: Naomi Goldstein, M.D., Chairperson, Isaac Ray Award Board, 15 West 81st St., New York, N.Y. 10024

A Symposium: Follow-Up Studies of Community Care

EDITED BY MILTON GREENBLATT, M.D., AND RICHARD D. BUDSON, M.D.

A session of the 128th annual meeting of the American Psychiatric Association, Anaheim, Calif., May 5–9, 1975, was devoted to follow-up studies of community care. The participants were:

Paul R. Polak, M.D., Executive Director, Southwest Denver Community Mental Health Services, Inc., Denver, Colo., and Michael W. Kirby, Ph.D., Research Director, Polydrug Treatment Center, Denver General Hospital, Denver, Colo.

Leonard I. Stein, M.D., Director, Research Department, and Mary Ann Test, Ph.D., Associate Director of Research and Research Psychologist, Mendota Mental Health Institute, Madison, Wis.

Allan Beigel, M.D., Director, Southern Arizona Mental Health Center, and Associate Professor of Psychiatry, University of Arizona College of Medicine, Tucson, Ariz.; Steven Gurgevich, Ph.D., Director, Halfway House Demonstration Research Project, Southern Arizona Mental Health Center; Frank A. Petroni, Ph.D., Medical Sociologist, University of Arizona; and Alan I. Levenson, M.D., Professor and Head of the Department of Psychiatry, University of Arizona College of Medicine.

Richard D. Budson, M.D., Assistant Professor of Psychiatry, Harvard Medical School, Boston, Mass., and Associate Psychiatrist, McLean Hospital, Belmont, Mass.; Molly C. Grob, S.M., Director, Evaluative Service Unit, McLean Hospital, and Special Instructor in Social Work Research, Simmons College School of Social Work, Boston, Mass.; and Judith E. Singer, Ph.D., Codirector, Evaluative Service Unit, McLean Hospital, and Assistant Clinical Professor of Psychology, Department of Psychiatry, Harvard Medical School.

Loren R. Mosher, M.D., Chief, Center for Studies of Schizophrenia, National Institute of Mental Health, Rockville, Md., and Alma K. Menn, Soteria Project Director, Mental Research Institute, Palo Alto, Calif.

Milton Greenblatt, M.D., Professor of Psychiatry, University of California, Los Angeles, School of Medicine, Los Angeles, Calif., and Chief, Psychiatry Service, Veterans Administration Hospital, Sepulveda, Calif., was the discussant.

At the request of the Editor, Dr. Greenblatt and Dr. Budson, who was chairman and organizer of the session, have abstracted and commented on the papers presented at the session; the abstracts and comments appear below. Address reprint requests to Dr. Greenblatt at the Veterans Administration Hospital, Sepulveda, Calif. 91343.

IT IS A MATTER for celebration that after so many years of experimentation with community alternatives we finally have some valid attempts to assess specific models on a scientific basis. This collection of papers has great importance for all who are interested in finding better ways to treat patients than through hospitalization in remote institutions.

Follow-Up Evaluation of an Inpatient Alternative Program

BY PAUL R. POLAK, M.D., AND MICHAEL W. KIRBY, PH.D.

In this 18-month study, patients were randomly assigned to either home treatment (experimental group) or hospital treatment (control group). The same clinical team provided treatment to patients in both groups. No specific criteria were set for the exclusion of patients who were transient, psychotic, or had a history of previous psychiatric hospitalization.

In the inpatient alternative community home system, 6 families in southwest Denver each accepted up to 2 patients at a time for a base contract amount of $7.50 per patient per day for room, board, and care. Each family was assigned a clinical staff coordinator to assume responsibility for family supervision and support. The families also met regularly to learn from one another and from the staff. Instead of the 24-hour nursing rotation of a psychiatric hospital ward, psychiatric nurses provided 24-hour coverage to all of the homes. The nurses were backed up in turn by a psychiatrist on call.

Treatment in the community home alternative consisted mainly of crisis intervention, social system intervention, and tranquilization; treatment in the hospital consisted of the standard program provided at the Fort Logan Mental Health Center in Denver.

The effectiveness of therapeutic intervention was determined by a treatment effectiveness scale, a goal attainment scale, self-disclosure measures, and a community adjustment scale.

Ten of the 48 patients initially assigned to the experimental group were unable to be treated in the home because of severe clinical problems and were therefore eliminated from the home group. The final sample consisted of 38 home patients and 38 hospital patients.

At the 4-month follow-up the home group was rated

as distinctly superior to the hospital group on all measures, and the vast proportion of the home patients were pleased with the families with which they lived.

The data unequivocably favored intensive treatment in a private home rather than in a hospital. Treatment costs for the private home system were approximately two-thirds those of psychiatric hospitalization. Thus the findings favor community-based alternatives most impressively.

DRS. GREENBLATT AND BUDSON COMMENT

According to the authors the 10 patients who could not be treated in a private home did not affect their results significantly. The nature of the treatment in the hospital needs more explication if we are to evaluate results as a function of the intensity of personal assistance given patients. The fact that good results were achieved at a lower cost is certainly cause to rethink the use of hospitalization. The fact that the study attempted to treat all classes of patients with varying degrees of severity of illness in the community and was successful with the exception of a small group is very interesting. We await the longer follow-up promised by the authors.

Training in Community Living: One-Year Evaluation

BY LEONARD I. STEIN, M.D., AND MARY ANN TEST, PH.D.

"Training in Community Living" was a unique community treatment model in that hospitalization was virtually eliminated. The program accepted a random sample of adult patients presenting for admission to a public mental hospital regardless of their symptoms or social resources. Treatment took place totally in the community through actual staff contacts with patients, families, and community resources.

To implement the program, a staff of psychiatrists, psychologists, social workers, occupational therapists, nurses, and aides was retrained to work with patients, families, community agencies, and individuals to mobilize all possible support systems for the patients' benefit. The program was staffed from 7:00 a.m. to 11:00 p.m. 7 days a week. A member of the professional staff was on call at night to give 24-hour coverage as needed.

Every effort was made to avoid hospitalization except for patients who were suicidal or homicidal or who required such high doses of medication that a structured environment was necessary. However, if patients were hospitalized, this was included in the results. Thus no patients were excluded from the study on the basis of severity of symptoms.

The patients lived in independent settings scattered through the community. Treatment consisted of participation in a full schedule of daily activities; pharmacotherapy was used when appropriate. The therapeutic staff motivated and supported the patients by being present or available at all hours. Staff members were visitors in the patients' homes and neighborhoods. They taught patients daily living techniques, such as laundry upkeep, shopping, cooking, using restaurants, grooming, budgeting, and using transportation facilities. Patients were given intensive assistance in finding jobs or sheltered workshop placements, and the staff continued daily contact with the patients and their supervisors or employers to help with on-the-job problems. Leisure time was enhanced through the development of the patients' social skills; the staff arranged relevant community recreation and social activities. A "can-do" philosophy was transmitted from staff to patients, their assets were stressed, and their symptoms were played down. Daily contact of staff members with patients was emphasized initially and gradually diminished as patients progressed in the treatment program.

Work with families was directed primarily toward breaking pathological dependencies so that the "sick child" could become a responsible adult. With married patients', meetings were held with both patient and spouse. With unmarried patients, meetings were held with the family to describe and explain community programs, especially how the patients would be living without support from relatives. Parents and patients were given a great deal of help in order to maintain the separation; staff members were constantly available to families as well as patients. Conferences were held with every relevant community agency to promote behavior responsive to the patients' needs.

The study group consisted of all patients seeking admission to Mendota Mental Health Institute who lived in Dane County, Wis., who were between the ages of 18 and 62, and who did not have severe organic brain syndrome or primary alcoholism. These patients were randomly assigned to either the community treatment group or the control group. Control patients (N=65) were treated in the hospital for as long as deemed necessary and then referred to appropriate community agencies. The community treatment patients (N=65) received training in community living for 14 months. Assessments were carried out at the time of admission (baseline) and then every 4 months for 28 months in personal interviews by a research staff operating independently of the clinical teams.

Ratings included clinical measures of symptoms, community adjustment, self-esteem, amount of burden felt by family, and cost-benefit analysis of the two models.

Of the 65 patients in the experimental group, only 12 were hospitalized during the first year of the study, whereas 58 of the 65 patients in the control group were hospitalized. Twenty-one patients in the control group had more than one admission during the first year, compared with 3 patients in the experimental group.

Experimental patients spent very little time in psychiatric institutions in comparison with control patients, and they were not placed in penal institutions more often than the control patients. Experimental patients spent more time employed and more time in sheltered employment than did control patients. On global measures of satisfaction with life, the experimental patients seemed more satisfied than control patients at the 12-month follow-up. They also scored higher in self-esteem and manifested a more significant reduction in symptoms from baseline to 12 months than did control patients. The family burden measures showed a drop in the burden level for experimental patients but not for control patients. Detailed cost-benefit data are not yet fully analyzed; however, preliminary results indicate that the direct treatment costs for the average experimental patient were less than those for the average control patient.

DRS. GREENBLATT AND BUDSON COMMENT

The great values of this study lie in the uniqueness of the community program, in the long-term follow-up, and in the fact that community care patients were rated superior to control patients on all measures of adjustment. These results were achieved without shifting the burden of patient care to family or to penal system. Quality of life, level of adaptation, self-esteem, and personal satisfaction were all gratifyingly higher in the experimental group than in the control group. Such a resoundingly positive result gives pause for reconsideration of the value of conventional hospitalization. Intensive individual community support programs were not linked to any specific facility, which is what one normally visualizes when one speaks of community-based treatment. This is altogether an important and impressive piece of work.

Symptom Improvement Among Patients After Discharge

BY ALLAN BEIGEL, M.D., STEVEN GURGEVICH, PH.D., FRANK A. PETRONI, PH.D., AND ALAN I. LEVENSON, M.D.

This study describes symptom changes following discharge of 205 patients consecutively admitted to three different treatment units of the Southern Arizona Mental Health Center: 1) a halfway house program, 2) an outpatient clinic, and 3) a day program. Patients were between 18 and 50 years of age and expressed a desire to remain within the State of Arizona after discharge. There was no randomization of patients among the several threatment modalities because of a desire to study the delivery system as it actually was.

Symptom distress was measured by a checklist at admission, at discharge, at 2 months after discharge, and at 4 months after discharge. Scores on nine symptom dimensions were developed, plus two summary scores; i.e., a general symptom index and a positive symptom distress level.

The halfway house patients had symptom distress levels comparable to outpatients and day patients at admission. The predominant symptoms were depression, anxiety, and interpersonal sensitivity. Halfway house patients reported lower levels of somatic complaints at admission. At 4 months after discharge, the halfway house patients consistently showed the greatest reduction in symptom distress on all of the elements of the scale even though this improvement had not been noted at discharge. A lack of improvement during treatment was not necessarily a bad prognostic sign, and discharge decisions might have been governed by factors other than symptom improvement.

Patients in the halfway house reported higher levels of symptom distress on several dimensions during treatment compared with their baseline scores and compared with the symptom levels of outpatients and day patients during treatment.

The average elapsed time from admission to discharge of patients in the halfway house program was 25.5 weeks, compared with 13.6 weeks for patients in the day program and 4.9 weeks for patients in the outpatient program.

DRS. GREENBLATT AND BUDSON COMMENT

This study, unlike the two above, made no attempt at randomization. Selection factors resulting in referral to specific modalities were not made clear. The reasons for which therapists excluded patients from any particular modality of care were not spelled out. Another compounding factor in evaluating program effectiveness is the fact that length of stay within a given modality varied from 25.5 weeks to approximately 5 weeks. No cost figures were given.

A Follow-Up Study of Berkeley House, a Psychiatric Halfway House

BY RICHARD D. BUDSON, M.D., MOLLY C. GROB, S.M., AND JUDITH E. SINGER, PH.D.

This is a descriptive analysis of results of treatment of patients in a halfway house affiliated with a private teaching hospital (McLean Hospital, Belmont, Mass.). The halfway house, Berkeley House, situated in downtown Boston, had the capacity to shelter 23 residents and a married couple who managed the house. A warm family atmosphere plus an open system focused on integrating the house and its members with the community. Treatment consisted of weekly meetings of the residents, family-style dinners, and planned social ac-

tivities to support both residents and alumni. Residents were expected to be occupied productively during the day at work or school.

The subjects of the follow-up were 78 former residents, all but 1 of whom were white and most of whom were single, separated, or divorced and from the middle and upper socioeconomic classes. We were able to obtain data for 54 of the 78 former residents.

The follow-up was based on interviews of the 54 former residents by social work students under close supervision. The average time of follow-up was 15 months. The major problems noted by the patients when they were admitted to McLean Hospital included inability to function even minimally, interpersonal tensions, drug abuse, antisocial behavior, depression, and suicidal tendencies. The patients had been hospitalized an average of 12 months at McLean and 3 months elsewhere. During the McLean hospitalization there was a high concentration of psychotherapy and drug therapy. The average stay at Berkeley House was 7 months.

At the time of follow-up, 91% of the 54 former residents were living in the community and 9% were in the hospital. Most of the former residents in the community (N=49) were living independently, and 74% were either in school, employed, or functioning as homemakers at the time of follow-up. Eighty-seven percent of those working full-time (N=20) rated their work as good to excellent. Relationships with families were rated good by 60% of the former residents, and social adjustment was judged improved by 70%. The overall clinical status of 72% of the former residents was considered excellent, and only 1 patient had made a suicide attempt.

Seventy-eight percent of the former residents continued contact with Berkeley House after leaving, and many who left continued their contacts with other residents. In looking back on the Berkeley experience, 75% of 49 respondents said that Berkeley House helped them and 53% of 47 respondents said that it surely prevented their rehospitalization. They emphasized sharing, a sense of community, freedom, and the group gatherings.

DRS. GREENBLATT AND BUDSON COMMENT

The authors wisely considered the halfway house only one step in the total career of the patient. The community network that eventually took over also added greatly to the patients' rehabilitation.

In this study we note that 30% of the sample was lost, that there were no collateral appraisals from an independent team, and that the patients were mainly from the middle and upper classes. There was no attempt to relate this modality of treatment to other possible approaches to the same population. However, one of us gains the impression that real and important gains were made by those who were fortunate enough to receive treatment at Berkeley House.

Dinosaur or Astronaut? One-Year Follow-Up Data from the Soteria Project

BY LOREN R. MOSHER, M.D. AND ALMA K. MENN

This is a sophisticated study challenging three familiar hypotheses in the treatment of schizophrenic patients: 1) that short inpatient stays are good, 2) that antipsychotic drugs should be the mainstay of any treatment program, and 3) that treatment is best carried out in a medical context.

Thirty young schizophrenic patients aged 16–30, unmarried, separated, widowed, or divorced, and deemed in need of hospitalization (but with no more than one previous hospitalization lasting for 2 weeks or less) were assigned to Soteria House, and 27 similar patients from the same group were referred to an active inpatient treatment ward of a community mental health center. The assessment battery, which was extensive, was repeated at intervals up to 24 months after admission to the study. Community adjustment data from a variety of situations were reported. Self-report, family report, therapist report, and therapeutic process data were included.

Soteria was a 12-room house located on a busy street in a transitional neighborhood of a city in the San Francisco Bay area that was designated a poverty area. The house accommodated only 6 residents (patients) at a time. The staff included 6 nonprofessionals (2 were on duty at any one time), plus a project director and a one-fourth-time project psychiatrist. Admissions were at the rate of 1 or 2 residents a month. Staff and patients shared the responsibility for household maintenance, meal preparation, and cleanup. The project director acted as a friend, counselor, supervisor, and object of displaced angry feelings. The part-time project psychiatrist who supervised the staff was seen as a stable, reassuring person. Every effort was made by staff to treat the patient as a person capable of being understood and assisted in the integration of his psychosis into the continuity of his life.

Control patients were admitted to the community mental health center's inpatient service, which consisted of two locked wards of 30 beds each with an admission rate of about 250 patients a month and a staff: patient ratio of 1.5:1. All control patients received phenothiazines. They were assigned to psychotherapy, occupational therapy, crisis groups, couples groups, or survival groups as indicated. When discharged they could go to the regional centers nearest their homes for outpatient care, which included partial hospitalization, individual and family group therapies, and medication follow-up. An extensive board and care system, including halfway houses, was available.

Assessment of 32 pretreatment variables revealed only one significant difference between experimental and control patients. Soteria patients stayed significantly longer in their initial episode of care than control patients—167 days versus 21 days—and signifi-

cantly fewer Soteria patients received antipsychotic medication—17% versus 100%. Fewer experimental patients were readmitted during the first 6 months after their discharge.

At 1 year there was a trend favoring the experimental group in reduction of psychopathology, but both groups changed significantly in comparison with their pretreatment levels. Experimental patients were significantly healthier than control patients at discharge, but no difference between the groups was noted at 6 months after discharge. At 6 months after discharge more experimental patients were living alone or with peers—60% of 20 versus 4% of 24; this trend was maintained at 1 year but not at a statistical level of significance.

At 2 years after discharge the overall trends were not appreciably changed. There were no essential differences in psychopathology between the groups, but the psychosocial adjustment measures tended to favor the experimental group.

No harm was done by the relatively long period of residential treatment. Withholding drugs did no harm in terms of symptom level, symptom reduction over time, or level of community adjustment. The conscious attempt to minimize the disease with its attendant stigmatization was held at least partially responsible for the ability of experimental patients to leave their families of origin and to live independently.

DRS. GREENBLATT AND BUDSON COMMENT

The authors themselves raise questions about lack of randomization and small sample size—criticisms that will be met by a second study. To this may be added the notation that experimental patients stayed longer in Soteria than did control patients on hospital wards. Data published previously (1) indicated that the direct cost of the first 6 months in the treatment system was the same for both groups.

Discussion

BY MILTON GREENBLATT, M.D., AND
RICHARD D. BUDSON, M.D.

It is gratifying to note these several attempts to obtain conclusive evidence of the efficacy of transitional modalities of community care for seriously ill mental patients after many years of experience with community mental health programs. It is also gratifying that some of the major assumptions made by the planners of social and community treatment tend to be supported by these studies.

In general the papers suggest a wide spectrum of effective community care. Home care, family care, and halfway houses constitute some of the major modalities. Patients appear to have improved in self-esteem, in socialization, in ability to work, and in satisfaction with their lives; yet they were not necessarily more of a burden to their families. In addition, there is a lack of stigma and greater anonymity for patients treated in the community; some can be treated in the community at less cost than in hospitals. It would appear that the concept of treating patients in community facilities or in their homes early in their clinical course and without disrupting their ties to family, occupation, or community has been given positive support by these studies.

These welcome results have been shown to apply generally to relatively unselected or minimally selected mentally ill patients. That is to say, community alternatives can be applied to a wide range of clinical conditions, some of them very severe. Only a relatively few patients will have to be referred to sheltered, medically oriented environments. These few include patients with severe psychotic depression who are at risk of suicide, patients with brain damage, and patients who are dangerously aggressive toward themselves or others.

There is hope, too, that as we learn what is offered specifically in the way of therapy in a particular modality, individualized assignments to these modalities may be made and perhaps even better results achieved in the future.

All of the community treatment models need more study. In addition to the paper on Berkeley House abstracted here, one of us (R.D.B.) also recently reviewed 33 halfway houses established in Massachusetts (2). These houses were largely nonprofit, operated in affiliation with mental health agencies or associations, were located in urban settlements, and were usually established, it is good to note, without particular community harassment. One-fourth of the patients in these halfway houses came from the community and one-half from state hospitals. On discharge from the halfway houses 41% went to independent living, 26% to family homes, and only 17% back to state hospitals. Forty-nine percent were able to be in sheltered or competitive employment.

Rog and Raush (3) recently summarized 26 statistical reports on halfway houses, indicating that about 80% of the residents had been able to adjust to community living and that rehospitalization was lower after residence in a halfway house than might otherwise be expected.

This kind of evidence supports the necessity to include partial hospitalization community alternatives in future federal health care legislation. Inpatient psychiatric hospitalization should not be the only funded alternative domicile for people who must live outside their homes. The cost-effective data noted in some of the reports support the notion that this could be done economically.

It should be noted that these papers do not discuss a primary aspect of community psychiatry—the assumption of responsibility by a given clinical team for a de-

fined geographic area. Also to be encouraged are studies of risk groups, preventive intervention in risk groups, and total area planning for mental health based on sound epidemiological surveys. Development of appropriate new delivery approaches for these communities provides the great challenge for the future.

A final problem: once a demonstration of an effective modality has been made, how do we export it? For example, in the paper by Stein and Test an exciting difference was shown between experimental and control groups, but the method of treatment was based on community involvement of staff in a very intimate and supportive way. How can this be taught effectively to personnel in other locations? There tends to be a serious lag between new knowledge, however convincingly demonstrated, and the adoption of this knowledge. In this regard the work of Fairweather and associates (4) on the report of the community lodge idea to 255 mental hospitals is extraordinarily enlightening. They found that only a very small percentage of institutions they contacted adopted the lodge approach and that this often required their personal involvement in selling the idea. The Fairweather study is a real step forward in our understanding of the problem of export and adoption.

In regard to the studies abstracted here, one can only hope that our psychiatric colleagues will not only be enriched in their general knowledge of the potentialities of community psychiatry treatment but also take actual steps to try these experiments in their own locales. The trial of new approaches in several sites is sure to enrich and enlighten all of us as well as extend additional benefits to more and more patients.

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A Five-Year Study of Brief Hospitalization

BY MARSHALL SWARTZBURG, M.D., AND ARTHUR SCHWARTZ, M.D.

The authors compare their experience with 4 years on a brief hospitalization unit based on crisis theory with a fifth year on the same unit based on a traditional psychiatric approach. In terms of demographic and diagnostic variables and rehospitalization rates, they found that the change in approach had no significant effect on the type of patient admitted or the treatment outcome. The fact that certain tasks necessary for rapid discharge were effectively performed accounted for the success of the unit.

THE GROWTH OF community mental health centers and the need to expand the delivery of care to an increasing number of patients have led to the development of a variety of clinical units that use the principles of crisis intervention. Originally postulated by Lindemann (1) and elaborated and popularized by Caplan (2), crisis intervention theory has been used as the guiding principle in a variety of clinical programs, such as emergency hotlines, emergency room care, and brief outpatient treatment. More specialized applications have included outpatient family crisis therapy (3, 4) and brief hospitalization units (5–7).

Although crisis intervention was geared initially to outpatient settings, it soon became obvious that seriously disturbed or suicidal patients often required hospitalization. Inpatient units structured to incorporate the principles of crisis intervention were therefore developed. At the same time that reports began to appear in the literature extolling the merits and successes of these brief treatment units (5, 6), the etiological significance in mental illness of life events upon which crisis theory is predicated came under increasing critical evaluation (8–11). There are few reports of the long-term performance of inpatient crisis intervention units and how they evolved as theory yielded to actual practice.

In this paper we will report on a five-year experience with one of the nation's pioneer brief treatment units (5). The successes and failures of this particular unit are used to derive implications for theory and practice.

Revised version of a paper presented at the 128th annual meeting of the American Psychiatric Association, Anaheim, Calif., May 5–9, 1975.

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THE SETTING

In 1967, a brief treatment inpatient unit called the Emergency Treatment Unit (ETU) was developed at the Connecticut Mental Health Center. The unit was designed to provide hospitalization for 3–5 days, followed by a 30-day outpatient follow-up by ward personnel. The duration of stay was deliberately limited to prevent regression and ensure the rapid return of patients to the community. The service was specifically organized to serve patients from lower socioeconomic classes who presented themselves at the emergency room of Yale-New Haven Hospital. The functioning of this unit during its early years has been previously reported; this unit was frequently visited by mental health professionals seeking to establish similar units in other institutions (5).

The ETU was housed on the first floor of the mental health center in an area opening directly onto the main lobby. The purpose of this design was to allow patients to mix with whoever chanced to be sitting in the lobby and thus to "diminish the tendency to perceive oneself as a mental patient in need of confinement" (5). There was a high staff to patient ratio, and the staff was highly trained and committed to the principles of crisis intervention.

The unit used a team approach that blurred traditional disciplinary roles. Therapy focused on the immediate precipitating issue. There was a bias toward admitting patients who presented with an acute and definable crisis. Personnel benefited from a feeling of high morale that ordinarily marks the start of new and innovative programs.

After four years of continual operation, a reorganization of the mental health center dramatically changed the unit. The unit was moved onto a traditional inpatient psychiatric ward with doors that could be and, in fact, were often locked. The setting was on the fourth floor, far removed from the lobby.

A new staff was assembled consisting primarily of nursing personnel from the traditional inpatient unit. The staff was unschooled in crisis intervention principles, mistrustful of the concept, and resentful of the change that had taken place on their service. In addition, the unit was denied its prior role in selecting

those patients deemed suitable for crisis intervention, and patients referred for hospitalization, regardless of their particular psychopathology or long-term prognosis, were admitted to the unit on a space-available basis. To meet the resultant increased demand for service, the number of beds available was approximately doubled, with a consequent reduction in the staff to patient ratio.

It now became possible to study whether the special characteristics that had been previously built into the unit based on crisis theory were, indeed, essential for the carrying out of an acute intervention program based on less than one week of hospitalization.

RESULTS

During the five-year period, 1,890 patients were admitted. Doubling the unit's bed capacity resulted in a yearly census of 480 as compared with a previous average yearly census of approximately 350—an increase of 37%.

The demographic characteristics of the patients treated remained constant throughout the five-year study period, despite the change in screening procedures and the increased number of beds. Of the patients admitted, 80% were white, 68% were female, and 60% were under 30 years of age.

Although data with respect to social class, determined according to Hollingshead's two-factor index (12), were not available for two of the four years prior to the change, the social class of the patients did not vary during the other three years. There is every reason to believe that social class remained constant throughout the five-year period; 75% of the patients came from classes IV or V.

A diagnostic breakdown of the patients revealed that approximatley 35% were psychotic—the vast majority (30%) carrying a diagnosis of schizophrenia and the rest (5%) with a diagnosis of affective disorder. Of the nonpsychotic patients (65%), 25% were diagnosed as having neurotic depression, 9% as having character disorders, 8% as having borderline states, 8% as having adjustment reactions, 3% as having other neuroses, and 4% as having organic brain syndrome. Alcoholism or drug dependence was the primary diagnosis for 6% of the patients, although these agents were abused by many of the other patients. There was no significant difference with respect to diagnosis before or after the change that took place in the unit.

Rehospitalization refers to the hospitalization of those patients who could not be discharged from the unit and were transferred to longer-term facilities or were rehospitalized at any facility during the 30-day outpatient follow-up period. During the four-year period preceding the change, 15% of the patients required transfer to another hospital and an additional 5% were rehospitalized during the 30-day follow-up, for a total rehospitalization rate of 20%. Following the change, 22% of the patients required transfer and 3% were rehospitalized during their follow-up, for a total of 25%. There is no significant difference between these figures.

The data reveal that the only significant demographic variable with respect to rehospitalization was sex—males had a significantly higher rehospitalization rate than females throughout the five-year period (32% versus 18%, $p<.001$, chi square, Yates' correction applied). Marital status, age, and race did not affect the rehospitalization rate.

The rehospitalization rate was approximately 40% for patients with schizophrenia and major affective disorders, and 32% of the alcoholic patients were rehospitalized. Patients diagnosed as having borderline states or character disorders had a rehospitalization rate of 20%. The rehospitalization rate for patients in all other diagnostic categories was 10% or less.

Although no data were available for the first four years reviewed, analysis of data from the last year revealed social class differences with respect to rehospitalization for patients with a nonpsychotic diagnosis. Twenty-five percent of the patients in classes I, II, and III were referred for further hospitalization, whereas only 10% of the patients in classes IV and V were so referred ($p<.02$, chi square, Yates' correction applied). There was no difference in this regard for patients who were psychotic.

DISCUSSION

Five years of experience with almost 2,000 patients demonstrate that brief hospitalizations can be of great value. Indeed, between 75% and 80% of all patients hospitalized on the ETU were successfully discharged. Although such findings appear to confirm the clinical applicability of crisis theory, careful assessment of the ETU raises questions as to which aspects of crisis theory were important with respect to the unit's functioning.

Crisis theory postulates that rapid and appropriate interventions in a time of a hazardous life situation can prevent the development of maladaptive coping mechanisms that may lead to regression into illness. By preventing the effects of adaptational failure and the resulting disability, crisis intervention is supposed to avoid the need for more extensive treatment at a later time. In addition, proponents of crisis theory postulate that resolution of the crisis can promote psychological growth and healthier adaptive patterns in the future.

Critics of crisis theory have pointed out that the theory implies that crises may be conceptualized and dealt with independent of the particular psychological or characterological traits of the individuals concerned (8). For this reason they question the relevance of the crisis theory approach to the real life situations confronting psychiatrists in emergency clinical settings. Defenders of crisis theory note that the theory assumes an external hazard and a "susceptible" individual interacting to produce a crisis. Since concepts

such as hazards and susceptibilities cannot be strictly defined, the meaning and applicability of crisis can be understood differently in different or even the same clinical settings. It is therefore important to identify those specific factors which resulted in the success of the ETU.

Although the theoretical set of the ward leadership changed from a broad adherence to crisis theory to a more traditional psychiatric outlook, the clinical focus was defined by the time limit placed on hospitalization. The clinical task was to treat those psychopathological and/or social factors which necessitated hospitalization. The abandonment of a ward setting specifically designed for crisis intervention and the screening procedures designed to select patients appropriate for crisis intervention had no significant effect on the type of patient admitted or the treatment outcome.

Consistently 40% of all schizophrenics who were admitted required rehospitalization—the crucial factor was severity of symptoms. Acute florid episodes invariably required further hospitalization. Our clinical observations agree with the reported findings that emotionally overactive, very suspicious, and severely disorganized patients require longer hospitalization than crisis units provide; similar results were found with those patients with affective psychoses. The clinical syndrome and its response to pharmacotherapy determined the outcome. This was true even when certain precipitating situations that may have played a role in the onset of the episode were easily resolved.

Schizophrenic patients whose adjustment outside the hospital was disrupted by life stresses or medication problems often presented with mild depressions, marital conflicts, symptoms of anxiety, and mild cognitive dysfunction. Reinstituting a proper medication regimen was often sufficient to abort the episode and allow discharge. Our clinical observations are also in agreement with those of Beck and Worthen (9), who found that schizophrenics admitted to a short-term inpatient service were less likely than other patients to have had a clear-cut precipitant or crisis that could account for their decompensations. These patients appear to get into difficulty with even the ordinary vicissitudes of life.

As might be expected, among the almost 50% of our patients with diagnoses of neurotic depression, borderline personality, and other character disorders, suicidal ideation or suicide attempts most commonly precipitated admission. Almost all of these individuals, including the neurotic depressives, had long histories of maladjustment to life stresses. Over 90% were recommended for further treatment after their 30-day follow-up.

The concept that a successful resolution of a crisis can foster psychological growth did not seem to apply to the majority of individuals with pervasively disruptive life-styles. However, crisis intervention theory provided the initial rationale for the development of the unit and was of heuristic value throughout the unit's history. The success of the unit can best be accounted for by the fact that certain tasks necessary for rapid discharge were effectively performed. These included critical clinical judgments about who could and could not be discharged and who represented lethal threats to themselves and others and a broad knowledge of referral and resource sources for patients within the community. The finding that significantly more patients in the upper three social classes who were not psychotic were referred for further hospitalization than patients of lower social class implies that when funds were available, dispositional choices approached a preconceived clinical ideal. Since the severity of the illness was the overriding factor in determining final outcome for psychotic patients, we found no difference in rate of rehospitalization with respect to social class.

Brief hospitalization units are best designed as component parts of a total care-giving system in which rehospitalization is seen not as a failure but rather one of many possible dispositions to be chosen in the best interest of the patient. In fact, in a system of mental health care that is becoming more varied and complex, rapidly matching a clinical situation with disposition and working to help the patient and his family accept that disposition are probably the basic reasons for the success of brief treatment units.

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Lithium Prophylaxis of Depression in Bipolar I, Bipolar II, and Unipolar Patients

BY RONALD R. FIEVE, M.D., TURKAN KUMBARACI, PH.D., AND DAVID L. DUNNER, M.D.

The authors investigated lithium prophylaxis of depression in bipolar I (N=35), bipolar II (N=18), and unipolar I (N=28) outpatients. Depression indices included frequency of depressive episodes, three measures of severity, dropouts due to depression, and time in study. There were significantly fewer episodes and dropouts due to depression in the lithium-treated than in the placebo-treated bipolar I patients. Lithium was superior to placebo on all indices in the bipolar II group (although the sample size did not permit statistical analysis) and on 3 indices in the unipolar group. The authors believe that lithium prophylaxis of depression has been demonstrated in these three subtypes but note the need for further research, particularly in the use of tricyclic antidepressants.

THE EFFECTIVENESS of lithium therapy in acute mania is well established (1–6). Although several centers have reported positive results from the use of lithium to treat acute bipolar depression, this finding needs further confirmation, particularly in comparison to the use of tricyclic antidepressants (4, 7, 8). Lithium's therapeutic efficacy in unipolar depression remains virtually untested. The prophylactic effects of lithium carbonate in bipolar I manic and bipolar II hypomanic phases are also well documented (9–16). However, lithium prophylaxis of the depressed phases of bipolar I, bipolar II, and unipolar illness has not been sufficiently investigated in previous studies (17). This paper, which is based on data collected in outpatient studies conducted over a 4-year period, represents an attempt to fill this gap in our knowledge of lithium prophylaxis of depression in affective illness.

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METHOD

All patients were diagnosed independently by two psychiatrists and met the criteria of Feighner and associates (18) for primary affective disorder. Voluntary informed consent was obtained for all research procedures.

We define our patients as follows: bipolar I patients have been hospitalized for mania and have had mild to severe depressions; bipolar II patients have been hospitalized for depression and have a history of hypomania not requiring hospitalization; and unipolar recurrent depressive patients have had at least 1 depressive episode requiring hospitalization and have no history of mania or hypomania (17). Patients in all 3 subtypes have normal functioning between attacks.

Details of the methodology for our double-blind placebo studies of lithium have been reported elsewhere (12, 13, 16, 17). In general, patients were randomly assigned to the placebo or lithium group. The two groups received identical white capsules containing either lithium or placebo, depending on the patient's randomized assignment. At the time of admission to the study, all patients were symptom-free and were not being treated with antidepressants or tranquilizing medication.[1] The treating psychiatrist, nurses, and patients were unaware of the specific drug assignments. Throughout the trial, serum lithium levels were monitored every 4 weeks and the psychiatrists (who were given fictitious levels for the placebo patients) regulated dosages to maintain a level of 0.7–1.3 mEq/liter.

Each patient visited the clinic every 4 weeks and was interviewed by a psychiatric nursing team. Patients were rated for mania and depression on a modified Hamilton Rating Scale (19) and for depression on a 3-point global scale. When a patient was judged to be ill by the rating team, an additional assessment was made by the treating psychiatrist. If the psychiatrist prescribed additional medication, the patient was recorded as having had an affective episode. Antidepres-

[1]Fewer than one-third of the bipolar I and bipolar II patients had been previously treated with either lithium or imipramine.

sants or, if the episode was manic, antipsychotic drugs were prescribed. During this period, the experimental medication was continued, and every effort was made to keep the patient in the research protocol. The intent was to treat the episode as vigorously as possible with the best available standard medications while continuing administration of the appropriate experimental medication (lithium or placebo). When the episode ended, the additional medication was withdrawn and the patient continued to receive only the experimental medication.

Subjects

Bipolar I patients. Thirty-five patients were available for the 4-year analysis of lithium prophylaxis in bipolar I depression. This is the sample we described previously (12, 13) in 2½-year reports (October 1969 to February 1972), with the exclusion of 17 patients who were either bipolar II or rapid cyclers. In the lithium group, there were 11 men and 6 women (mean ages=53.1 and 44.3 years, respectively). The placebo group consisted of 8 men and 10 women (mean ages=39.6 and 46.5 years, respectively).

All patients were followed until March 1974. The cut-off point for inclusion in the randomized sample was November 1971 for 34 of the 35 bipolar I patients; 1 patient was added to the sample in March 1972. All bipolar I patients had a history of at least 2 episodes of affective disorder of at least 2 weeks duration and of sufficient severity to impair usual functioning in the 2 years prior to their entrance into the study. This report thus assesses lithium prophylaxis for periods of up to 4 years and 5 months.

Bipolar II patients. The sample of bipolar II patients consisted of 18 individuals. In the lithium group there were 2 men and 5 women (mean ages=58 and 50.2 years, respectively). The placebo group consisted of 5 men and 6 women (mean ages=55.2 and 49.2 years, respectively.) The criterion for inclusion was a history of at least 2 affective episodes in the 2 years prior to the study. Data from October 1969 to March 1974 were analyzed, and the cut-off point for entry into this study was November 1971. There were 2 rapid cyclers who remained in both the lithium and placebo groups; data for these patients were analyzed for all indices except duration and frequency of attacks.

Unipolar recurrent depressive patients. Twenty-eight patients with unipolar recurrent depression were studied. The criterion for inclusion was a history of at least 2 depressive episodes in the 5-year period before randomization (17). Data from December 1969 to March 1974 have been analyzed. The lithium group consisted of 1 man and 13 women (mean ages=60.0 and 43.3 years, respectively). In the placebo group, there were 2 men and 12 women (mean ages=64.5 and 54.4 years, respectively.)

Multiple Indices for Evaluation of Prophylaxis

The four following indices were used to evaluate depression prophylaxis:

1. Mean number of months in study.
2. Frequency of depressive episodes—the mean number of attacks per patient year was determined using the statistic described by Deming (20).
3. Severity of depression—determined by 1) depression ratings on a 3-point global rating scale (1.0=normothymia, 2.0=mild depression, and 3.0=severe depression) scored by nursing teams blind to the randomization code, 2) number of patients hospitalized, and 3) duration of depression, with the endpoint being return to normal mood and withdrawal of supplemental medication or time of dropout, if the latter occurred.
4. Number of dropouts due to depression.

RESULTS

Bipolar I Patients

Data on bipolar I patients are presented in table 1. Lithium-treated patients remained in the study longer than placebo-treated patients, primarily because placebo-treated patients dropped out due to mania. Several indices, including episodes per patient year and dropouts due to depression, demonstrated depression prophylaxis in the lithium group. The average duration of depressive episodes was 58 days for lithium patients and 48 days for placebo patients. This difference is not statistically significant. However, these results may reflect a methodological problem, since more placebo

TABLE 1
Indices of Depression Prophylaxis for Bipolar I Patients

Index	Group		Significance
	Lithium (N=17)	Placebo (N=18)	
Mean number of months in study	40.12	18.20	p<.01
Depressive episodes			
Mean number per patient year*	0.194	0.853	p<.01
Number with episodes	5	8	
Number hospitalized	2	2	
Mean rating of severity**	2.30	2.44	
Mean duration of episode (days)	58	48	
Number free of episodes	12	10	
Manic episodes			
Number of patients with episodes	10	17	
Number hospitalized	1	7	p<.05
Number free of episodes	7	1	p<.02
Total number of patients hospitalized for depressive or manic episodes	3	9	p<.05
Dropouts			
Total	2	18	p<.001
Due to depression	0	4	p<.05
Due to mania	0	13	p<.001
Other causes	2	1***	

* By Deming's statistic.
** On 3-point global rating scale.
*** This was the only placebo-treated patient who dropped out free of episodes.

TABLE 2
Indices of Depression Prophylaxis for Bipolar II Patients

Index	Group	
	Lithium (N=7)	Placebo (N=11)
Mean number of months in study	30.29	21.18
Number in clinic after 52 months (survivors)	4	2
Depressive episodes		
Mean number per patient year*	0.212	0.367
Number with episodes	4	7
Number hospitalized	1	2
Mean rating of severity**	2.66	2.60
Mean duration of episodes (days)***	57	194
Number free of episodes	3	4
Dropouts†		
Total	1	7
Due to depression	1	7
Number free of both manic and depressive episodes	3	3

* Does not include 2 rapid cyclers in the lithium group and 2 in the placebo group. The number of patients was too small to apply Deming's statistic.
** On 3-point global rating scale.
*** Rapid cyclers and dropouts due to depression who could not be evaluated for a sufficient time period were excluded from analysis. The number of patients in the lithium group was too small for statistical analysis.
†Significantly fewer dropouts in the lithium group than in the placebo group ($p<.05$).

TABLE 3
Indices of Depression Prophylaxis for Unipolar patients

Index	Group		Significance
	Lithium (N=14)	Placebo (N=14)	
Mean number of months in study	20.52	9.00	$p<.02$
Depressive episodes			
Mean number per patient year*	0.59	1.60	$p<.05$
Number with episodes	8	9	
Number hospitalized	2	4	
Mean rating of severity	1.87	2.17	$p<.05$
Average duration of episodes (days)	86.25	75.00	
Number free of episodes	6	5	
Dropouts			
Total (due to depression)	2	3	

* By Deming's statistic.

patients than lithium patients dropped out of the study. Therefore, data on duration of depressive episodes are less complete for the placebo patients.

Bipolar II Patients

As table 2 indicates, lithium prophylaxis was less clearly demonstrated for bipolar II patients than bipolar I patients on several indices. The data do favor lithium over placebo in terms of the length of time patients remained in the study. There were almost 50% fewer episodes of depression in the lithium group than the placebo group, although the number of patients in the lithium group is too small to appropriately apply Deming's statistic. Similarly, although the average duration of depressive episodes was 57 days for lithium patients versus 194 days for placebo patients, the sample size is too small to permit tests of statistical significance.

Four patients in the lithium group had episodes of depression and 1 patient dropped out of the clinic because of depression. In contrast, 7 patients in the placebo group had episodes of depression, and all 7 of the placebo dropouts were due to depression. The difference between numbers of dropouts due to depression in the lithium and placebo groups is statistically significant, indicating lithium prophylaxis of episodes of depression severe enough to cause patients to quit the research protocol.

Unipolar Recurrent Depressive Patients

Table 3 presents data on patients with unipolar recurrent depression. Lithium-treated patients stayed in the study longer and had fewer depressive attacks than placebo-treated patients. The mean depression rating also showed that lithium lessened the severity of depressive episodes.

DISCUSSION

Our findings of fewer depressive episodes and fewer dropouts due to depressive episodes in the lithium group indicate that lithium is highly effective in prophylaxis of the depressive phase for bipolar I patients. Similar findings based on single indices of depression (e.g., improvement versus no improvement and hospitalization versus no hospitalization) have been reported in a single-blind study from our group (21) and in other double-blind studies (9, 15). In our study, a large proportion of placebo-treated bipolar I patients experienced acute manic episodes and dropped out before experiencing any depressive episodes. This confounds the evaluation of lithium's action on the depressive phase of the illness.

The high percentage of dropouts due to mania is a potential bias in comparisons of duration and severity of depression in the lithium and placebo groups. Since information on severity and duration is less complete for placebo patients than lithium patients, any bias in results should tend to favor placebo. However, there are no significant differences between placebo and lithium on these measures in the bipolar I group. We suggest that under ideal conditions (no dropouts) there might be demonstrable differences in duration and severity of depression favoring lithium.

Data on the bipolar II patients also suggest lithium prophylaxis of the depressed phase on several indices. The frequency of depressive episodes in the lithium group was approximately half that of the placebo group, although there were too few patients to permit application of Deming's statistic. As with the bipolar I group, there was evidence that lithium attenuates the severity of depressions in that fewer lithium patients

than placebo patients dropped out due to depressive illness. Findings of fewer dropouts are consistently associated with lithium efficacy, and in the present study 57% of the lithium patients versus 18% of the placebo group remained in the research protocol until the end of the 4-year trial. Furthermore, the duration of depressions was considerably shorter in the lithium group than in the placebo group (57 days versus 194 days), although there were too few cases for statistical analysis. All of these indices indicate that lithium acts prophylactically on bipolar II depression and is superior to placebo.

It is of interest that the addition of data from 20 more bipolar II patients, who were randomized into the study later and participated for a shorter time period, obscured the prophylaxis of depression we have reported here (22). This suggests that it may take a longer time to demonstrate lithium prophylaxis in bipolar II than in bipolar I patients, since lithium was shown to be equal to placebo when data from patients who had been studied for shorter periods were added.

Our data also indicate that lithium has a prophylactic effect in unipolar recurrent depression. There were fewer and less severe episodes and fewer dropouts in the lithium-treated unipolar group. We have previously reported results favoring lithium over placebo in the treatment of recurrent depressions, as have several other groups (9, 10, 11, 17, 23). Prien and associates (23) demonstrated the equal efficacy of lithium and imipramine as compared to placebo through a significant reduction in affective episodes among 78 unipolar patients randomly assigned to lithium, imipramine, or placebo. Klerman and associates (24) and Mindham and associates (25) have also shown depression prophylaxis with tricyclic antidepressants. Tricyclics combined with maintenance lithium therapy may be superior to either lithium or tricyclics alone in the overall group of unipolar patients. It is also possible that there are subtypes of unipolar depression which would do better if treated with lithium alone or antidepressants alone.

Our findings point to the value of employing multiple indices of prophylaxis in ongoing studies of recurrent illnesses. When the cutoff points for termination of episodes are not delineated through follow-up, placebo dropout rates and duration of episodes may appear as false negatives when other analyses show positive results. In such instances, the length of regular attendance in the clinic and the relative time that patients are normothymic are often more reliable indices of prophylaxis than dropout rates and duration of the depressive episodes. Patients are considered to be survivors if they have not dropped out or been hospitalized during the course of the study, despite mild to moderate depressions or hypomanic episodes. The time these people survive, i.e., remain in the study, constitutes another "benefit" index of prophylaxis, as can be seen in our data for bipolar II patients. In our study, duration of attendance was longer in lithium-treated groups for each subtype.

There may also be false positives in the dropout and hospitalization rates for depression. For example, patients who believe they benefit from clinic attendance and from the medication they are receiving may actively attend the clinic during episodes, while those who feel they do not benefit may drop out and be unavailable for depression ratings. We hope that such patients occur in equal proportions in the randomized lithium and placebo groups.

In summary, our data indicate lithium prophylaxis of depression on multiple indices in bipolar I, bipolar II, and unipolar patients. However, additional studies of lithium prophylaxis are needed, particularly in relation to tricyclic medication, since millions of cyclically depressed people are now being considered as candidates for maintenance drug therapy, which is the real psychopharmacological revolution in psychiatry.

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Alcohol and Drug Abuse Consultation in the General Hospital: A Systems Approach

BY MARC GALANTER, M.D., TOKSOZ B. KARASU, M.D., AND JACK F. WILDER, M.D.

The authors describe a program that is directed at assuring effective treatment and referral for alcoholic and addicted patients in a general hospital; the program was developed to assure maximal utilization of available addiction treatment facilities without adding to the hospital staff. Drawing on systems theory, the authors review both a pragmatic and a conceptual basis for psychiatric intervention with paraprofessional support to provide consultation to the general medical staff who treat alcoholic and addicted patients. They stress the feasibility of altering the nature of the hospital system to achieve more effective treatment for these patients.

THIS REPORT PRESENTS an approach to providing alcoholism and drug abuse consultation services to a general hospital. It draws on our experience in establishing such a service for the Bronx Municipal Hospital Center, the principal teaching hospital of the Albert Einstein College of Medicine. The perceived need for this program arose from the experiences of the hospital staff in their respective services. Many alcoholic and addicted patients were found to be uncooperative with medical regimens; they often disrupted hospital routines. Effective assistance was needed for the management of drug-abusing patients while they underwent medical treatment in the hospital. A committee of the medical board of the hospital was therefore established to initiate a program to answer this need. We describe the approach we developed because it may serve as a model for similar work in related contexts.

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THE HOSPITAL AND ITS DISTRICT

The hospital serves a district in the northeast Bronx with a population of 423,000. The neighborhoods in this district range from single-residence upper-middle-class areas to lower-class public housing areas, with some slums characterized by tenement housing. Although the overall population is three-quarters white, certain areas of the district are two-thirds black and Puerto Rican. Patients from these areas, as well as substantial numbers of patients transferred from emergency services adjacent to the hospital's catchment district, yielded a disproportionately large percentage of addicted and alcoholic patients at the hospital.

Some 25,000 patients are treated annually on the inpatient services; 45,000 patients are treated annually in the emergency rooms. An unpublished survey of the hospital showed that 5.1% of the inpatients and 2.1% of the emergency patients were apparently addicted to or abusing drugs. Another unpublished survey of the medical wards showed that 21% of the patients were alcoholic, a figure similar to that reported in the literature (1).

In our discussions with members of the medical, nursing, and social service departments, it became apparent that little special attention was being given to the treatment of the addictive problems of these patients, although a great deal of staff effort was invested in treating their medical problems, usually the sequelae of alcoholism or addiction. In addition, the addictions were not quite considered medical illnesses; rather, they were considered "social diseases," and "dirty" ones at that. Because of this, we decided that the hospital staff were as important as the addicted patients as a target for our program. In this regard, it became useful to conceptualize an approach to this issue in terms of systems theory.

A SYSTEMS APPROACH

Systems theory was developed by Ludwig von Bertalanffy (2) as an approach to the study of interactions among related functional entities. These entities and the relationships among them constitute a system. Closed systems are those which are considered in isolation from their environment. Open systems take into

account the effect of interactions with the environment as well as internal variations. It is therefore possible to isolate a particular process and represent it as a closed system. However, this may not adequately represent the full complement of forces that are in operation. For a more valid representation, the systems may require analysis in relation to the external forces operating on it, i.e., as an open system.

In studying mental health service delivery, this approach has been used in the analysis of attitudinal and administrative issues affecting the interaction of an acute psychiatric service in a general hospital with a state-hospital-based long-term psychiatric treatment facility (3). By applying computer simulation techniques, means of minimizing patient dropout have been studied within the context of a community mental health center (4). Similar computer simulations have been used in the field of addiction to predict the effect of various treatment modalities and control operations on heroin distribution patterns within a defined community (5) and to analyze the cost-effectiveness of various addiction treatment strategies (6).

We adopted this approach in addressing the following questions: What factors eventuate in the limited attention paid to the primary medical problem of alcohol and/or drug abuse within the context of a medically sophisticated hospital setting? What means would be most efficient in facilitating effective treatment for these patients? We began by viewing the hospital-based treatment of the medically ill as a system.

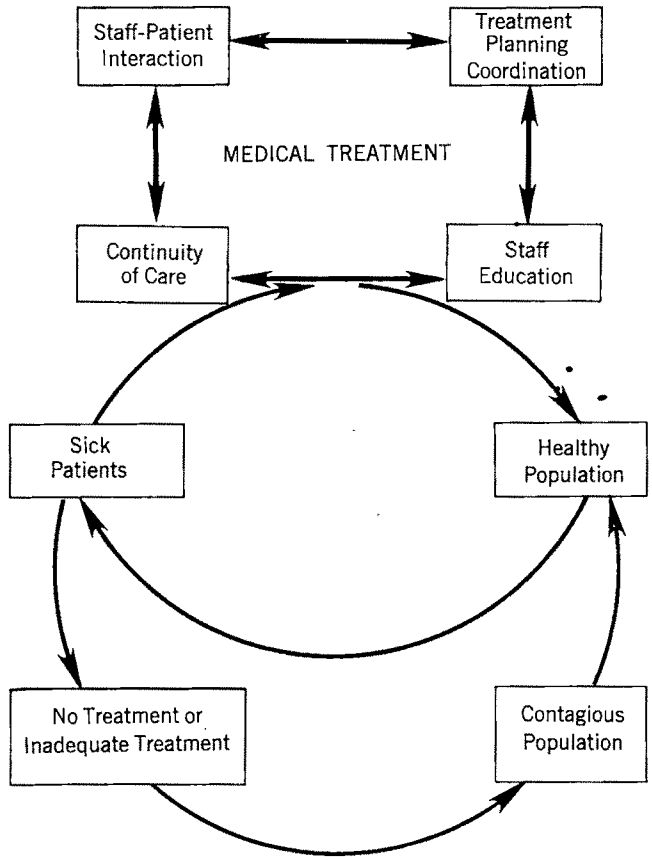
The most frequently used model of medical treatment can be conceptualized as a closed system. This model may be applied to treatment of a disease such as appendicitis. Because the factors one considers in the treatment of such an illness can be limited to direct medical intervention, the system may be viewed as a closed one: the medically ill are admitted to the hospital, receive treatment, and then rejoin the healthy population.

This model of medical care was being applied at the hospital to the treatment of addicted and alcoholic patients at the time intervention was requested. Direct treatment was given only for the medical sequelae of addiction. These sequelae were regarded as if they were the primary disease process. After the acute medical difficulties were resolved, patients were at most given the name of a drug treatment program to contact. The possibility of the hospital staff's active involvement in the patients' alcohol or drug problems was not considered a part of this closed medical treatment system, and the issue of drug or alcohol abuse treatment per se was not seen as related to the operations of the general hospital. In our opinion, this model was intimately related to the management problems the staff experienced in working with alcoholic and addicted patients.

A second model of medical care is generally applied in the case of infectious diseases in order to deal with factors that directly affect the natural history of transmitted illness. If the closed system of the initial treatment model were applied, medical intervention would be directed solely toward infected patients. Such treatment would be inadequate because the potential for spread of the disease requires consideration of the medical system in relation to its environment, that is, as an open system. This introduces issues such as quarantine into the medical treatment system to prevent disruption of function within the hospital system. If this model were applied to addicted and alcoholic patients, however, they would be treated in isolation from other patients, perhaps on a separate medical service. This would perpetuate the exclusion of addictions from consideration as medical illnesses that merit treatment and would fail to deal with the social factors that lead to "reinfection" outside the hospital and to patients' reluctance to seek help for their addictive illnesses.

We concluded that effective intervention required the examination of a subsystem within the models just described—that a third, "social disease" model had to be used (see figure 1). Medical treatment could not be presumed to be a distinct entity in the case of such "social diseases" as addiction and alcoholism. It must be viewed as a complex subsystem that interacts with its own environment so that the operations of one affect the definition of the other.

FIGURE 1
The "Social Disease" Systems Model



Within the subsystem of medical treatment, the following areas required examination: 1) staff-patient communication, 2) coordination of treatment planning, 3) continuity of care, and 4) staff education. These four factors were seen to be relevant to the very nature of what was defined as medical treatment in this third model and will be described below. A consultation service for alcoholic and addicted patients should be designed to intervene in these four areas to assure that the investment of effort will yield success. By these means, the problems of drug abuse and alcoholism in the hospital would be redefined so that the medical management of the alcoholic or addicted patient would include consideration of the primary problem of addiction as well as its sequelae.

THE CONSULTATION SERVICE

A service was established to provide consultation for patients with drug abuse problems while they were receiving general medical treatment; its existence was publicized at the hospital. The staff of the consultation service included a psychiatric director (M.G.) and three counselors, two of whom were ex-addicts. When a request for consultation was received, a counselor was sent to assess the clinical situation. After a review of the case and consultation with the ward's medical staff, plans were formulated regarding ward management and, when appropriate, referral to long-term treatment.

Emphasis was also placed on training exercises for the medical, nursing, and social work staffs of the hospital. At scheduled sessions, consultation service members made presentations related to alcohol and drug abuse that were appropriate to the audience. These presentations were made in such contexts as medical grand rounds, emergency room staff meetings, and social service conferences.

During the first 15 months of operation of the program, 950 patients were seen. Table 1 indicates the service of origin of patients for whom consultation was requested. The emergency rooms were responsible for about one-third of the consultations because they deal with the immediate results of drug overdose and intoxication as well as many sequelae of alcoholism and addiction. The medical and surgical services also yielded a large proportion of the referrals because of the frequency of hospitalization for overdose, alcoholic gastrointestinal disease, major trauma, and multiple abscesses. Cases of opiate addiction on the obstetrics service were often identified because of withdrawal symptoms in the newborn.

The psychiatry wards, which house over 10% of the beds in the hospital center, contributed only 2% of the referrals for consultation. This probably reflects the fact that many problems seen by psychiatrists as principally psychiatric actually develop secondarily to a primary difficulty of drug or alcohol abuse, often unattended to by the psychiatrist (7). However, in the psychiatric emergency room, where the search for rapid disposition other than psychiatric hospitalization is often the goal with alcohol- or drug-abusing patients, the services of the consultation staff were more frequently sought.

TABLE 1
Referrals for Consultation for 950 Patients, by Service That Referred Them

Hospital Service	Patients Referred	
	Number	Percent
Emergency rooms		
Medical/surgical	106	11
Psychiatric	218	23
Total	324	34
Wards		
Medicine	182	19
Surgery	186	20
Obstetrics	128	13
Psychiatry	22	2
Other	96	10
Total	614	64
Clinics	12	1

TABLE 2
Referrals for Treatment for Drug Abuse or Alcoholism for 596 Patients, by Type of Treatment

Type of Treatment	Patients Referred	
	Number	Percent
Drug abuse treatment		
Residential	31	5
Ambulatory	90	15
Methadone	60	10
Detoxification only	41	7
Total	222	37
Alcoholism treatment		
Detoxification	164	28
Outpatient therapy	200	34
Total	364	61
Other	10	2

Of 876 patients for whom consultations were made in 1974, 596 (two-thirds) were referred for treatment of alcoholism or drug abuse before their discharge, as indicated in table 2. Follow-up revealed that 449 (three-quarters) of those referred appeared for treatment within 1 week of the referral. Given the general reluctance of addicted patients to participate in treatment, as well as the mutual distrust generally experienced between such patients and hospital staff, this represents an appreciable rate of success in our opinion.

CASE REPORTS AND DISCUSSION

The following vignettes are given to illustrate the role of the consultation service within the hospital sys-

tem with specific regard to the four areas of medical management noted to bear on the "social disease" systems model.

Staff-Patient Interaction

Case 1. A 35-year-old unemployed man on methadone maintenance who lived with his parents was admitted to the surgical service with stab wounds incurred in a street fight. Consultation was requested when the patient, who had previously been uncooperative with medical routines, was found to be using barbiturates brought in by visitors. When interviewed by the counselor the patient admitted that he had been discharged from two methadone programs during the past 2 years because of barbiturate abuse; he anticipated a similar outcome at his current program. The patient's status was reviewed, and a schedule for barbiturate detoxification was established. The drug abuse counselor saw him daily, and he became more cooperative. Discussions with the patient often centered around his opportunity to enter a drug treatment program that incorporated both residential treatment and methadone maintenance. The patient entered this program on discharge from the hospital.

As is often the case with addicted patients, the ward staff and this patient became polarized in a hostile interaction. At such times the patient is seen by the staff as a culprit who undermines their attempts to make the medical regimen effective. He then serves as a scapegoat for a variety of staff frustrations, many of which stem from their own feelings of guilt and helplessness in the many clinical situations in which their concerted treatment has limited success. The patient, habituated to violating norms of behavior, suppresses his own understanding of the anger he may arouse. He has in the past precipitated rejections by helping agents and approaches the ward situation with little hope that his problem with drug abuse will be accommodated.

The counselors, who are called from outside the immediate ward system, arrive without commitment to either of the "combatants." They have had experience and training in working with addicts and in eliciting a history of drug abuse, and they are seen by the patient as a step removed from the medical hierarchy. These factors make it easier to ascertain the specifics of the patient's drug abuse history. In addition, because they are trusted by the ward staff, counselors help to defuse an explosive situation and may markedly improve the pattern of interaction between patient and staff.

Coordinated Treatment Planning

Case 2. A 24-year-old single woman was hospitalized for hepatic complications of alcoholism. She had started to drink heavily after her common-law husband left her a year before and she moved in with a relative who was an alcoholic. The patient was at first adamant in refusing treatment for her alcoholism. During the course of her hospitalization, however, the counselor maintained regular contact with her while the ward social worker began seeing her mother. Two meetings were held with all four parties and the ward physician. The patient ultimately accepted referral to a residential setting for alcoholic and drug-abusing patients.

Many treatment agents operate within the hospital complex and, although each may deal directly with the patient, their efforts are often not coordinated. This is particularly true with the alcoholic or drug-abusing patient, whose physicians, social workers, and nurses may relate to different facets of a complex social issue. In this case, the availability of a single person who worked to facilitate communication within the treatment subsystem was valuable. The presumption of effective coordination of all those treatment entities which act on the "sick patients" in our systems approach (see figure 1) cannot be made without a carefully coordinated treatment plan.

We attempt to enlist the assistance of the ward staff in disposition planning, making use of the specialized knowledge they may provide. This also serves to educate the staff regarding the issues involved in drug abuse treatment. As they become aware of management options that were not previously apparent, the ward physician and social worker begin to view the addicted patient as one who presents problems that may have solutions. This contributes to undercutting the frustration and consequent resentment that has previously been more typical of their response.

Continuity of Care

Case 3. A 16-year-old high school student was referred by the psychiatric outpatient department to the psychiatric emergency service. She had been brought there by her mother because of many arguments between her and her parents, most of which centered around her association with a group of friends involved with drugs and alcohol. During the interview the counselor ascertained that she had been regularly abusing barbiturates and wine for 2 years. When she was first evaluated and then seen on two subsequent visits, she was unwilling to enter a long-term therapeutic program. As is the usual practice, however, the counselor made it clear that he would be available if she wanted help in the future. Two months later the patient contacted the consultation service herself. After further sessions, referral was made to an ambulatory therapeutic program for adolescent drug abusers.

Continuity of care is a goal that is often elusive within the context of a large hospital. This is particularly true for the drug-abusing patient because of his or her role as renegade within the treatment system. Multimodality services that are integrated into the fabric of the medical treatment system are maintained for such complex illnesses as renal disease and infectious disease. Similar services would assure continuity of care for the drug-abusing patient as well. This would militate against shuttling the abuser from one hospital department to another, as occurred with this patient, who had been sent from the outpatient department to the emergency room, and also facilitates the patient's returning to a consultation context with a familiar staff. In addition, the counselors, who have a more extensive knowledge of the many agencies to which they may refer addicted patients, can assure more flexibility in choosing a program especially suitable for a particular patient. The original referring service then

comes to see such patients as ones whose difficult problems may be dealt with by a more sophisticated approach rather than as patients whose problems are unsolvable.

Staff Education

Some situations warrant systematic intervention with a larger group of staff. This was our experience on the postpartum ward and newborn nursery. The consultation service was contacted by the nursing supervisor for these units after a number of arguments had arisen between the nursing staff and addicted women who were admitted for delivery. One call was precipitated by an incident in which a patient struck a nurse's aide in the newborn nursery. This patient had angrily insisted on seeing her child at a time that conflicted with ward regulations, and the aide, in angry response, had called the mother a "junkie who was killing her child."

After consulting with the head nurse and a number of staff members, we decided to conduct a series of eight weekly meetings with the nursing staff that embodied a variety of didactic approaches. At some of the sessions nursing staff members were encouraged to ventilate their feelings regarding the addicted patients, many of whom presented difficult management problems. Techniques for management were discussed. In one session a film was shown of a nurse working with an addicted patient in a hospital setting. Two sessions were devoted to conveying specific information regarding the history and pharmacology of drug and alcohol abuse.

Staff members were often defensive about their own hostility toward addicted patients, and special care was taken to avoid accusatory behavior that might elicit further defensiveness. This issue was particularly relevant for the obstetrics service: the nursery staff, often with ample justification, saw themselves as protectors of helpless infants whose lives were threatened by addicted mothers. It was important that the nurse's sense of frustration and anger be given open expression at these meetings so that it might be dealt with constructively.

COMMENT

The program outlined in this paper represents an effort at intervention in the hospital as a treatment system, directed principally at the redefinition of what is considered medical treatment of the addicted or alcoholic patient. Because the interventions described here are made at a time when contact between the caregiving community and the addict is premised on the offering of patently helpful medical assistance, a unique opportunity exists for establishing an alliance with such patients. The consultation service is oriented toward altering the views of both the hospital staff and the alcoholic or addicted general medical patient. It thereby becomes a vehicle for assuring that actors in the "social disease" system will come to view addiction as a treatable illness rather than as an encumbrance to the legitimate medical routine.

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Competency-Based Psychiatric Education

BY HARVEY M. WEINSTEIN, M.D., AND MICHAEL L. RUSSELL, PH.D.

The focus of training in a competency-based residency program is on ensuring that all residents attain prespecified levels of competence for particular objectives in each training activity. The authors examine the components of a competency-based program and describe the phases of development that their department went through in creating such a program. They conclude that the competency-based training model directly faces the issue of certifying competence by holding itself accountable in a demonstrable way for ensuring that its residents have mastered specific areas of knowledge, skills, and attitudes.

DURING THE PAST FEW YEARS residency training programs in psychiatry have come under increasing scrutiny by those within and outside the medical profession. In this era of increasing consumerism and government participation in all levels of health care, psychiatry is being called on to reassess its certification procedures, establish peer review mechanisms, and justify training costs. In response to these demands there are continuing debates surrounding issues in residency education (1–7), such as defining a core curriculum, establishing a first postgraduate (internship) year, and teaching personal development or somatic therapies.

It is our contention that many of these current issues are symptomatic of a deeper, more fundamental problem in residency education. To date, psychiatry has not clearly defined the skills, knowledge, and attitudes that the psychiatrist-in-training must demonstrate in order to be certified as competent (8, 9). It is our belief that the profession can no longer avoid beginning the difficult, often emotion-laden task of specifying what a psychiatrist should know and be able to do.

Although we may not yet be able to understand or even accurately describe much of what occurs in the therapeutic process, most clinicians would agree that there are many areas that can be identified as central to the training of any psychiatrist, regardless of theoretical framework. It is only after these areas have been clearly identified that the educational issues of length or format of training can be addressed. Once we have described the knowledge, skills, and attitudes that we expect our residents to learn, a variety of paths by which a resident masters these skills can be developed. Equally important, having prespecified criterion levels for performance, assessment procedures can be established for both evaluation of learning and evaluation of competence (10). Once the acquisition of core skills can be objectively measured, a residency training program can be individually tailored for the resident.

The following example illustrates how a resident would proceed through training in crisis intervention if training were approached from this perspective.

> Dr. X enters the first year of the residency program on July 1. During the first week, he completes a series of exercises in all areas of training offered in the department. One of these tests is a written exercise based on the stated behavioral objectives for training in theory and techniques of crisis treatment. If the resident successfully demonstrates that he knows crisis theory and can apply it in a clinical setting under the supervision of a faculty member (i.e., evaluate, diagnose, and appropriately manage a suicidal patient), he may be excused from the seminar on crisis treatment and the crisis clinic rotation. If he cannot demonstrate this knowledge and the requisite skills, he attends the seminar and completes the rotation.
>
> At the end of the rotation and seminar, the resident is retested. If he is unsuccessful in demonstrating his mastery of crisis theory and practice at this time, he may elect a tutorial, spend extra time on the crisis clinic rotation, seek additional readings, or review demonstration videotapes. Throughout the training program he is afforded ample time and various options to acquire the specified competencies. Once he has successfully demonstrated mastery of crisis treatment, he turns his attention to working on other areas.

With this example in mind, we will examine the components of a competency-based residency program. In addition, we will describe the phases of development of such a program that we experienced in the Department of Psychological and Social Medicine of Pacific Medical Center.

Revised version of a paper presented at the 128th annual meeting of the American Psychiatric Association, Anaheim, Calif., May 5–9, 1975.

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COMPETENCY-BASED LEARNING

A competency-based training program (11–13) differs from traditional psychiatric residency programs. The standard educational practice in residency programs has been to preset the length of time allowed for each training activity (e.g., a 12-week seminar or a 6-month rotation) and to define only vaguely the objectives for the activities. As a result, the resident emerges from a residency having gained varying degrees of competence in a number of areas undifferentiated as to their importance. In a competency-based residency, however, the focus of training is on ensuring that all residents attain prespecified levels of competence for particular objectives in each training activity. The time for completion of training is allowed to vary for the individual resident within the 3-year period specified by the American Board of Psychiatry and Neurology.

Phase 1: Core Areas

The competency-based program has been built on a framework of core areas and optional areas (14). These concepts provide a broad behavioral description of the knowledge and abilities each resident is expected to acquire from departmental teaching activities. The descriptions have been in continuous development by an interdisciplinary team of mental health professionals (psychiatrists, psychologists, and social workers) and the residents in the program. The core area descriptions represent a commitment by the department to delineate what the faculty consider necessary for the resident to learn before completion of the residency. The process of developing core areas involves hours of deliberation and debate by the faculty. Once agreed upon, these areas provide the structure on which the program is based. The faculty understand that these descriptions represent a consensus of what the department currently accepts as essential for the practicing psychiatrist and also recognize that these areas may be modified by experience and feedback.

The core area descriptions have been written in broad terms to serve as a general outline within which the department can focus training. These goals are guidelines to be used by individual faculty members in the creation of specific performance objectives for clinical rotations and instructional activities. The general areas covered in these descriptions include the following: diagnostic knowledge and skills, social management, fundamental theories of behavior, treatment knowledge and skills, somatic management, legal management, treatment monitoring, breadth of treatment experience, community psychiatry, personal and professional growth, and related professional skills (see appendix 1).

In the process of creating these core areas a series of optional areas also emerged. While pursuing mastery of the skills and knowledge areas specified for each of the core descriptions, a resident has the opportunity to acquire additional training in any of the optional tracks: research competencies, teaching, administration, and advanced training in such specialty areas as child psychiatry, behavior therapy, and consultation. The resident works with a faculty member who acts as program adviser to determine which of the core or optional areas will be covered in each stage of his or her professional development. An individual program is therefore tailored to the resident's own professional or personal goals.

In developing the residency program we have had to work from the broad goals outlined in the core area descriptions to behaviorally referenced performance objectives (15). This approach has enabled us to reorient the faculty to view the residency training program in terms of skills and knowledge that can be expressed specifically as performance objectives rather than in the broad terminology of a core curriculum. These performance objectives specify the extent to which the resident must perform a specific behavior in a particular setting to demonstrate mastery of the ability. In other words, the performance objectives clearly define the required behavior of the resident; the quality of the resident's performance in terms of strength, duration, or frequency; and the social or physical conditions under which the behavior must be performed.

Performance objectives have been grouped under three headings: knowledge (what the resident needs to know), skills (what the resident should be able to do), and attitudes (the personal characteristics that the resident should develop). The process of education then involves the development of learning objectives in these three areas. Every teacher and supervisor in this program participates in developing specific objectives for whatever aspect of the program for which he or she has responsibility. These objectives must be related to a core or optional area that the faculty as a whole has previously identified.

As the performance objectives for each instructional activity are determined before the resident begins the training experience, the faculty member's role in training becomes that of facilitator, helping the resident master the stated objectives. The resident and the instructor/supervisor become partners in the learning process. The competency-based system of training therefore makes certain that the learners and teachers are clearly aware of the goals of the training (i.e., they know what is to be evaluated and, because these goals are described behaviorally, how they will be measured). As George Miller (16) said, "The final test lies not in what . . . [the student] was taught, but in what . . . [the student] does."

Phase 2: Instructional Steps

Once the performance objectives for the instructional activity have been identified, the nature of the instruction that will be used to teach them must be determined (see appendix 2). In most cases, instructors have tended to build their seminars and clinical rotations around clusters of learning modules. Each learning module focuses on a specific topic and is composed

of a series of performance objectives.

The learning modules are designed to be as self-contained as possible. All of the materials needed to master the performance objectives are presented or available within the module. This unique feature of the instructional activities allows the resident to select from a course of instruction the specific modules that teach the skills he needs to acquire. As the learning modules develop, the faculty identify a variety of presentations of the material. These may include audiovisual presentations from past seminars, recordings of work with patients that illustrate particular skills, role-play demonstrations of technique, and the assignment of relevant literature to read. Eventually many alternative methods of presenting the same material become available to the resident. These materials can be selected to meet the individual resident's own style and rate of learning. In this way, if the resident does not master a particular competency on the initial presentation, a variety of methods continue to be available to him or her to help develop mastery. Such an approach differs from the practice found in many psychiatric residencies of offering the resident only a single path for acquiring competence in a given area.

Phase 3: Assessment

Unlike most norm-referenced evaluation systems, in which the resident is compared with other students in the same group and given a relative evaluation, assessment in a competency-based training program is criterion-referenced and specific to the resident. That is, the resident's abilities are evaluated in relation to a prespecified set of behaviors. Because the performance objectives have been clearly specified for each instructional activity, the task of evaluation becomes a straightforward determination of whether or not the resident has demonstrated a particular behavior according to a given standard under the prescribed conditions. If the resident does not demonstrate mastery, he or she returns to practice the skill and is reevaluated at a later time.

The evaluation of the resident's skill occurs at three different points in the acquisition of the skill. Before each seminar and clinical rotation the resident is offered the opportunity to demonstrate his or her mastery of the skills and knowledge to be taught in the instructional activity. This procedure allows the resident to bypass training activities that are unnecessary for him or her and to proceed to other experiences. Increased faculty time and effort can then be spent with residents who have yet to master the specific performance objectives concerned.

The second evaluation occurs at the completion of each training activity. In this evaluation the resident demonstrates the skill immediately after its acquisition. That is, the skill is learned, practiced, and evaluated by itself. This type of evaluation occurs on completion of a seminar or rotation.

The third type of evaluation is scheduled every 6 months. In this evaluation the skills of the resident are assessed in combination, as they would be used in clinical practice. This formal cumulative evaluation requires the resident to demonstrate his or her complete therapeutic repertoire and knowledge base as a functioning clinician. It ensures that the skills the resident demonstrated during each of the seminars and clinical rotations have been retained. Recently this took the form of "treating" a simulated patient as she moved from initial presentation at a crisis clinic to an inpatient unit to a halfway house and finally into outpatient therapy. Through a combination of paper and pencil examinations and live interviews with a simulated patient, all of the performance objectives covered in the clinical rotations and department seminars offered during the previous 6 months were evaluated. In addition, each interview was rated according to objective criteria to evaluate interview skills. The interviews were videotaped and rated by the faculty. The results were then reviewed with the resident.

These taped interviews can also be used for comparison with subsequent interviews performed in later evaluations. Areas in which the resident would benefit from further training are also identified so that the resident will attain mastery of these in the succeeding 6-month period.

In summary, assessment in a competency-based training program requires the determination of whether a resident has successfully mastered the prespecified performance objectives. Although we have directed our initial efforts toward developing reliable and valid instruments to do this, we also recognize that this process requires a continual review of the original performance objectives. The faculty evaluator must answer not only the question, Has this resident demonstrated mastery of these performance objectives? but also the question, Should these performance objectives be accepted as indicators for mastery of the core area material? Development of assessment methodology in a competency-based program requires a critical eye on both of these issues.

IMPLICATIONS OF THE PROGRAM

A direct result of our competency-based model for training is that as faculty members have specified the performance objectives taught in their seminars and clinical rotations, areas of overlap have become clarified. In several areas, needless repetition of instruction has been eliminated and a concerted effort has been made to develop a complementary relationship among the instructional activities. A coordinated training program in which knowledge is taught in one setting and applied and evaluated in another is gradually emerging. The program is beginning to confront the frequently heard lament of the resident that training in psychiatry lacks cohesiveness and congruence.

We have found that a major consequence of developing this model of psychiatric residency education is that our training program is directly facing the issue of

certifying the competence of its graduates. The program is holding itself accountable in a demonstrable way for ensuring that its residents have mastered very specific areas of knowledge, skills, and attitudes. One of the byproducts of this educational model is that the student is trained to objectively scrutinize his or her learning needs, develop ways of meeting these needs, and evaluate his or her success in acquiring the needed abilities. The resident becomes responsible for sharing in the development of his or her education as well as evaluating how he or she is learning. A process is established that we hope will promote the continuing education of the psychiatrist.

It appears to us that the competency-based educational model also has important implications for the national certification process. If therapeutic skills and knowledge areas can be objectively identified and agreed on, the potential exists for focusing certification by a regulatory body on these performance objectives. Such a certification process would be criterion-referenced (i.e., based on stated preset minimum levels of competency of which every candidate for certification would be aware before the evaluation) and would require the candidate to demonstrate competency for abilities mastered in his or her own training program.

With the increasing demand on our profession to justify our skills, treatments, and costs, the possibility now exists for us to teach and certify our abilities as mental health professionals in a way that has heretofore not been possible.

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APPENDIX 1
Sample Core Areas

DIAGNOSTIC KNOWLEDGE AND SKILLS

The mental health professional, given a particular patient, demonstrates the ability 1) to perform a complete mental status examination and 2) to differentiate between descriptions of various behaviors and inferences based on such descriptions.

FUNDAMENTAL THEORIES OF BEHAVIOR

Developmental Theory

The mental health professional can describe various developmental theories concerning the patterns of behavior over the life span, noting the specific developmental tasks for infancy, childhood, adolescence, early adulthood, maturity, old age, and dying.

Biological Theory

The mental health professional can describe current concepts and research data concerning the role that genetic endowment plays in the genesis of the following illnesses: schizophrenia, affective disorders, and alcoholism.

TREATMENT KNOWLEDGE AND SKILLS: THE INTERVIEW

The mental health professional, having established a therapeutic contract with its general agreement as to goals, demonstrates certain necessary interview skills, as follows: given a particular patient, demonstrates that when appropriate, he or she can 1) in the initial interview, establish that degree of rapport which leads to the patient's return and 2) "modify the therapeutic approach," that is, make changes in his or her overt behavior when indicated as agreed upon by therapist, supervisor, and patient.

APPENDIX 2
The Competency-Based Model As Applied to a Seminar in Emergency Psychiatry

CORE AREA: FUNDAMENTAL THEORIES OF BEHAVIOR: CRISIS THEORY

The mental health professional can 1) describe the ways in which a social network a) contributes to crisis development and b) contributes to crisis resolution; 2) describe the emergency psychotherapist's work in terms of various techniques that distinguish emergency psychotherapy from other types of psychotherapy (e.g., crisis interviewing, environmental manipulation, decision counseling).

Performance Objectives

1. Given two different instances of a patient in crisis, the mental health professional can a) describe and define the concept of ecological group, b) name the members of the patient's ecological group, c) discuss the patient's crisis in terms of the pressures (strain) registered throughout the entire ecological group at the time, and d) identify other potential victims of crisis in the group.

2. Given two instances of an acutely suicidal patient in the emergency room, the mental health professional can a) evaluate the suicidal risk, b) identify the immobilization response in significant others, c) suggest possible lifelines, d) state when hospitalization is the appropriate management, and e) state when involuntary hospitalization is the appropriate management.

Instructional Activities

1. Seminar in Crisis Theory

The first performance objective described above will be discussed in two one-hour seminar sessions. The residents will review a chapter of the instructor's book dealing with principles of crisis intervention.

For the second performance objective the five evaluation procedures for dealing with the acutely suicidal patient will be discussed in three one-hour seminar sessions. Two articles discussing the theory and use for each procedure will be distributed. In one session, a videotape will be played illustrating how an experienced therapist employs each procedure with a simulated patient in crisis.

2. Clinical Rotation: Emergency Room

Each resident will be on call for psychiatric emergencies in the emergency room at least one evening a week throughout two years of the residency program. He or she will also spend six weeks in a crisis clinic.

The resident must successfully accomplish both of the following: 1) the resident completes a written posttest (exercise) at the end of the seminar sequence that allows the resident to demonstrate mastery of the performance objectives for hypothetical patients in crisis; 2) the resident presents to his emergency room supervisor two cases of acutely suicidal patients seen in the emergency room and describes how he or she employed each procedure with each patient.

Alternate Teaching Sequence

If the resident does not master the performance objectives, the faculty member will direct the resident to one or more of the following: 1) viewing of additional videotape(s) of an experienced therapist working with crisis situations, 2) reading literature that discusses these techniques, 3) listening to an audiotape of the faculty discussing these procedures, and 4) assignment to the emergency service for an additional six weeks with a tutor.

Amantadine Versus Trihexyphenidyl in the Treatment of Neuroleptic-Induced Parkinsonism

BY WILLIAM E. FANN, M.D., AND C. RAYMOND LAKE, M.D., PH.D.

Amantadine is a putative dopaminergic compound known to be therapeutically effective in idiopathic and postencephalitic Parkinson's disease. In a double-blind placebo-controlled crossover study of 39 psychiatric inpatients, amantadine and trihexyphenidyl were equally effective in treating drug-induced parkinsonism, and amantadine produced fewer and less severe side effects. The authors suggest that amantadine is an effective alternative to atropine-like agents, with fewer implications for long-term risk of tardive dyskinesia.

THE PARKINSONIAN-LIKE neurotoxic side effects of neuroleptic compounds have been recognized since the introduction of chlorpromazine in the early 1950s. Since drug-induced parkinsonism is symptomatically equivalent to the idiopathic or postencephalitic types of Parkinson's disease, clinicians have reasoned that the atropine-like antiparkinsonian agents that are effective in the treatment of Parkinson's disease might also reverse the drug-induced phenomena. This clinical supposition has been proven by broad experience to be substantially correct, and it has become standard practice to prescribe antiparkinsonian agents prophylactically at the outset of neuroleptic therapy.

However, recent evidence indicates that these atropine-like agents may increase the patient's risk of developing tardive dyskinesia, and some clinicians are now prescribing antiparkinsonian agents only after the patient develops symptoms of extrapyramidal neuroleptic side effects, rather than prophylactically (1, 2). Furthermore, there is growing agreement that the antiparkinsonian compounds should be discontinued after a very limited period of time and the patient reevaluated for recurrence of parkinsonian symptoms (3).

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An additional consideration in the prescription of antiparkinsonian medication for drug-induced symptoms is the possibility that these atropine-like agents create or aggravate a hypocholinergic state through long-term suppression of those striatal neuronal systems dependent upon acetylcholine as a transmitter agent (4). Because all but two of the currently available antiparkinsonian agents are atropine-like (i.e., antagonize striatal acetylcholine function), we chose to explore the possibility that restoration of the dopamine-acetylcholine balance in the striatum could be accomplished through the use of a compound that enhanced striatal dopamine activity rather than blocking acetylcholine. Amantadine hydrochloride is a compound without anticholinergic effects that putatively acts to enhance central nervous system dopamine (5–8). It has been therapeutically effective in idiopathic and postencephalitic Parkinson's disease and is commonly prescribed for treatment of these conditions (9). It was our intention to test the compound's effectiveness in drug-induced parkinsonism as an alternative pharmacological approach to treatment with fewer implications for long-term risk.

METHOD

Subjects

Forty-one patients from two psychiatric institutions were accepted for the study after clinical examination and diagnosis of drug-induced parkinsonism. Informed consent was obtained from each patient after the nature of the experiment was fully explained. The history and medical and psychiatric records of each patient showed no indication of preexisting idiopathic or postencephalitic Parkinson's disease. All subjects had developed drug-induced extrapyramidal symptoms during treatment with antipsychotic medication for the following disorders: schizophrenia, chronic undifferentiated type (N=20); schizophrenia, chronic paranoid type (N=7); schizophrenia, schizo-affective type (N=5); schizophrenia, hebephrenic type (N=1); schizophrenia, catatonic type (N=1); schizophrenia, type undetermined (N=2); senile psychosis (N=2); manic-depressive psychosis (N=1); postpartum psychosis (N=1); and chronic organic brain syndrome associated with syphilis (N=1). Pregnant women and patients with hypersensitivity to antiparkinsonian or stimulant agents were excluded.

Each subject was evaluated by means of a medical and psychiatric history, including records of past and present antipsychotic medications. Results and records of prior antiparkinsonian medication were assessed when possible. All patients were determined to be free of significant cardiovascular, renal, and hepatic disabilities. Each subject was maintained on his neuroleptic medication without change in the dose throughout the period of administration of coded antiparkinsonian medication. All antiparkinsonian medications were stopped at least 3 days prior to baseline measurement.

Procedure

The patients were randomly assigned to two groups, one group (A→T) starting with 100 mg of amantadine twice a day and crossing over to 4 mg of trihexyphenidyl twice a day and the other group (T→A) starting with 4 mg of trihexyphenidyl twice a day and crossing over to 100 mg of amantadine twice a day. Dosages remained constant throughout the study. Group A→T received amantadine as coded medication "b" for 2 weeks; group T→A received trihexyphenidyl as coded medication "a" for 2 weeks. The severity of the parkinsonism and treatment-emergent symptoms were measured at baseline (just prior to beginning the coded medication) and at examinations scheduled for the 1st, 3rd, 7th, 10th, and 14th days on medication. After 14 days placebo was substituted for coded medication. Those patients who experienced significant signs of parkinsonism while receiving placebo were given the alternate to their first coded medication for a second 2-week period, during which they were scheduled for examinations as before. Both periods of coded medication were double blind. The placebo period was single blind. Twenty-one patients were assigned to the T→A group and 20 patients to the A→T group. Two patients withdrew from the T→A group before completing the first medication schedule.

The severity of the parkinsonism was graded on the Simpson-Angus Rating Scale (10) at each examination. The following factors were rated from 0 to 4 in increasing order of severity: gait, arm dropping, shoulder shaking, elbow rigidity, wrist rigidity, leg pendulousness, glabella tap, tremor, and salivation. The sum of the scores of these 9 signs was calculated as a measurement of parkinsonian severity.

The following 8 treatment-emergent symptoms were recorded and scored from 0 to 3 in increasing order of severity at each examination: dry mouth, visual disturbance, urinary hesitancy, hair loss, inability to sit still, confusion, agitation, and tardive dyskinesia.

The average improvement of medication over baseline was calculated separately for the T→A and A→T groups for each examination. The average improvements were compared between the two groups. Student's t test was applied to assess the significance of the values of group differences at each time. At each point Wilcoxon's matched-pairs signed-ranks test was applied separately to each group to determine the significance of improvement following medication over baseline. Side effect scores were totaled and compared for the two groups.

RESULTS

First Period of Coded Medication

Both amantadine and trihexyphenidyl were effective treatments for drug-induced parkinsonism, and their efficacies were determined to be equivalent. The average percent of improvement for amantadine over baseline was as follows: day 1, 10%; day 3, 22%; day 7, 42%; day 10, 52%; and day 14, 53%. The trihexyphenidyl group showed the following improvement over baseline: day 1, 3%; day 3, 27%; day 7, 35%; day 10, 53%; and day 14, 45%. At every dosing time the confidence level for the mean percent of improvement with trihexyphenidyl overlapped the observed mean percent of improvement with amantadine. There was no significant difference between the values derived during the trihexyphenidyl and amantadine administrations. The degree of improvement with the two compounds was well correlated at all examination times. The maximum therapeutic benefit was observed at approximately 10 days. Examination on the first postdrug day showed that neither compound effected improvement of a statistically significant degree at that time. At all subsequent examinations the percent of improvement with amantadine was significant ($p \leq .01$). The percent of improvement with trihexyphenidyl was significant at the 3rd day of examination ($p = .05$) and thereafter ($p \leq .01$).

Table 1 presents a detailed comparison of the efficacy of the medications over baseline and placebo.

Second Period of Coded Medication

This group included 20 patients who experienced recurrence of significant parkinsonism with placebo. These included 9 of the 21 in the T→A group and 11 of the 20 in the A→T group. Data generated from the values at baseline, during placebo, and 14-day examinations on both coded medications were evaluated in two ways. Trihexyphenidyl and amantadine were compared to respective baselines and placebos for assessment and comparison of efficacies. In addition, a direct comparison was made between the efficacies of trihexyphenidyl and amantadine. All 20 subjects evaluated in this group received both compounds in a double-blind, double crossover paradigm. Table 1 compares the improvement in the subjects' clinical conditions brought about by both drugs with values from respective preceding placebo and baseline periods. These values are statistically significant at the .01 and .05 levels as indicated. These data are consistent with the hypothesis that trihexyphenidyl and amantadine efficacies are equivalent. Four pair-wise comparisons can be made among the group means in table 2. In each case, the mean of one sample falls within the con-

TABLE 1
Comparison of the Efficacy of Medications Over Placebo and Baseline Based on Examination on the 14th Day of Medication

Item	Improvement of Trihexyphenidyl Group Over		Improvement of Amantadine Group Over	
	Baseline: T→A Group	Placebo: A→T Group	Placebo: T→A Group	Baseline: A→T Group
Number of patients*	9	11	9	11
Number				
Worse	1	0	1	0
Unchanged	2	1	1	0
Improved	6	10	7	11
Percent				
Worse	11	0	11	0
Unchanged	22	9	11	0
Improved	67	91	78	100
Mean percent of improvement				
Lower confidence level	15	38	22	34.6
Estimated	39**	51***	42**	40.6***
Upper confidence level	62	64	62	46.6

* Not all patients completed both periods of coded medication.
** $p<.005$ (t test).
*** $p<.01$ (t test).

fidence level of the other, yielding no statistically significant difference between their means (t test).

Because mean total severity scores in both groups differed between baseline and placebo, we did not calculate the percent of improvement with amantadine over trihexyphenidyl to test their significance and compare the two drugs directly. Instead, we calculated for each patient the difference and percent of improvement of trihexyphenidyl over baseline or placebo, and of amantadine over placebo or baseline. The significance of the deviation of the mean of these differences from 0 was tested. The data in the T→A and the A→T groups and the combined data from both groups were treated separately. Statistically significant results at the .10 level or beyond were not found in any case. These data further indicate that trihexyphenidyl and amantadine are equivalent in efficacy.

Two subjects were withdrawn from the study due to continuing severe parkinsonism. These subjects failed to respond adequately to either compound at the dose level allowed by the study protocol. Although these patients experienced modest relief of symptoms while they received the study medications, their symptoms of parkinsonism were too pronounced to allow continuation on the fixed dose, and they were removed for treatment with more potent doses of standard antiparkinsonian agents. Both subjects were acutely psychiatrically ill and required high doses of neuroleptics (1000 mg per day of chlorpromazine or the equivalent) to control their psychotic symptoms.

DISCUSSION

Amantadine is a putative dopaminergic compound known to be effective in the treatment of idiopathic and postencephalitic Parkinson's disease (9). In a double-blind placebo-controlled crossover study we found that amantadine, at a dose of 100 mg twice a day, was therapeutically equivalent to 4 mg of trihexyphenidyl twice a day in the treatment of neuroleptic-induced parkinsonism in hospitalized psychiatric patients. Amantadine produced fewer and less severe side effects than trihexyphenidyl, although these differences did not reach a level of statistical significance. These data suggest that amantadine is an effective agent in the treatment of neuroleptic-induced parkinsonism.

Neither medication provided complete relief to all subjects, although subjects with remaining symptoms obtained enough relief to allow them to carry out activities of daily living without difficulty. It is possible that a dose schedule that would allow increases in antiparkinsonian medications to accommodate severe symptoms would have provided some subjects with additional symptomatic relief.

TABLE 2
Paired Means of Treatment Group Severity Scores

Treatment Group	Mean Severity Scores				
	Minimum	Lower Confidence Level	Estimated	Upper Confidence Level	Maximum
Baseline	9	12.9	17.1	21.3	32
Trihexyphenidyl	1	5.6	9.18	14.0	25
Placebo	6	12.0	16.6	20.1	34
Trihexyphenidyl	0	5.5	7.7	10.0	16
Placebo	2	11.8	16.7	21.6	29
Amantadine	1	5.2	10.7	16.2	33
Baseline	7	15.0	18.0	21.0	26
Amantadine	3	8.6	11.0	13.4	21

The possibility exists, of course, that other subjects with acute drug-induced parkinsonism who have not been previously treated with antiparkinsonian agents may not respond as consistently as did our test group. Most of the subjects selected for our trial had responded to other antiparkinsonian agents in the past, and this would tend to constitute a biased group. Subsequent clinical trials of amantadine should include a defined sample of patients who have received no prior antiparkinsonian treatment.

In addition, subsequent studies on this model should carefully evaluate the role of rating scales in the data compilation. Our rating scales may not have sufficiently reflected the full range of improvement experienced by the patients. We were unable to quantify some of the data from the Simpson-Angus scales (e.g., handwriting, card-counting) because the active psychoses of some patients imposed an uncontrollable variable upon the instrument. However, we believe that the data generated by physician examination and from rater observation were consistent and reliable.

Since chronic antagonism of striatal acetylcholine may contribute to tardive dyskinesia (4), and since amantadine has no demonstrable atropine-like effects, it appears to be a preferred compound in the treatment of drug-induced parkinsonism. Amantadine could be used in combination with anticholinergics to reverse parkinsonism if satisfactory response was not obtained from currently recommended doses of amantadine. This would in effect decrease the amount of atropine-like compound used and possibly decrease the risk of tardive dyskinesia. Our current evidence indicates that it would be preferable to prescribe a compound that enhances the suppressed striatal dopamine systems rather than suppressing the normally active acetylcholine systems in neuroleptic-induced parkinsonism. However, these speculations must await further clinical trial and epidemiological data from long-term dosing studies with amantadine before any definite recommendations can be made.

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A Follow-Up of 78 Patients with Gilles de la Tourette's Syndrome

BY RUTH D. BRUUN, M.D., ARTHUR K. SHAPIRO, M.D., ELAINE SHAPIRO, PH.D., RICHARD SWEET, M.D., HENRIETTE WAYNE, M.D., AND GAIL E. SOLOMON, M.D.

The authors conducted a follow-up study of 78 patients with Gilles de la Tourette's syndrome. Four of the patients were in spontaneous remission; 59 patients taking haloperidol showed an average improvement of 79.5%; and the remaining patients, 3 of whom were taking medication other than haloperidol and 12 of whom were not taking any medication, showed an average improvement of 24.7%. Side effects were the main cause of discontinuing haloperidol. The authors found that response to haloperidol was unrelated to family history of tics, age at onset, type or severity of symptoms, or signs of organicity.

BETWEEN 1965 AND 1973, 80 patients were diagnosed as having Gilles de la Tourette's syndrome at the Payne Whitney Clinic, New York, N.Y. Extensive data have been collected on these patients, all of whom received some treatment with haloperidol. The present study was undertaken to evaluate the clinical course of Tourette's syndrome after chemotherapeutic treatment. We were also interested in the incidence of complete remission, if any, and, because haloperidol has been generally acknowledged to be the drug of choice in the treatment of this syndrome (1–3), whether different types of patients or different symptoms responded differently to haloperidol.

METHOD

Patients selected for the study had been initially evaluated by one of us (R.D.B. or A.K.S.). The diagnostic criteria were onset of symptoms between the ages of 2 and 16; gradual progression from single, simple tics to multiple, often complex movements; development of involuntary vocalizations ranging from grunts to actual words; and varying course with periods of waxing and waning and a shifting of the actual types of symptoms. Coprolalia was considered pathognomonic, but it was not considered necessary for a diagnosis of Tourette's syndrome (4, 5). Patients were assigned severity ratings at the initial evaluation on a 4-point scale according to the following criteria:

1=mild. Symptoms are infrequent and inconspicuous and are often unnoticed. Patients are able to control symptoms substantially in public. Complete absence of symptoms may occur for brief periods.

2=moderate. Symptoms are obvious to all observers but are not necessarily bizarre. Untrained observers might consider these patients merely nervous. Some ability to control symptoms in public exists. No asymptomatic periods occur.

3=marked. Symptoms are obvious and may appear bizarre to some or many observers. Patients may control symptoms somewhat in public, but not for any sustained period of time.

4=severe. Symptoms are obvious, bizarre, and cannot be controlled substantially. Patients attract attention wherever they go.

Of the 80 patients originally evaluated, 2 had died by the time of follow-up (both by suicide). All of the 78 remaining patients completed a questionnaire that asked the following questions:

1. What medications are you taking? What dosages and variations in dosage of these medications have you taken during the past 6 months?
2. What specific symptoms have occurred during the past 6 months? Which have been the most severe? Which have been the most frequent?
3. What is your estimate of the frequency of all of your symptoms on an average day, on a scale ranging from no symptoms at all to 1 symptom every 5 seconds?
4. What specific side effects have you had from medication? Rate each side effect as to severity on a 5-point scale on which 1=slight and 5=extreme.
5. Have you had any periods of complete remission?
6. Have there been times when symptoms were worse? Why?
7. Estimate, in a percentage, how much of an improvement or worsening there has been in symptoms from before treatment to an average day in the last 6 months.
8. Rate the present severity of your illness on a 4-point scale from mild to severe according to the criteria used by the physician at the initial evaluation (de-

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scribed above). (The patients had no knowledge of the physicians' ratings.)

All 78 patients responded to the questionnaire. Thirty-seven of these patients were evaluated by either or both of the two physicians who had evaluated them initially. The severity of symptoms of all 78 patients was rated without knowledge of the patients' self-ratings. The percent of change in symptoms compared with pretreatment severity was evaluated as follows: complete remission; 90%–100% improvement; 80%–89% improvement; 50%–79% improvement; 10%–49% improvement; and no improvement or worsening.

The 78 patients included 20 women, 57 men, and one transsexual (a male when first evaluated who was a female at the time of follow-up). They ranged in age from 6 to 67. The follow-up evaluation was done 7–103 months after the initial evaluation (an average of 32 months between evaluation and follow-up). Sixteen patients had discontinued taking medication, and 62 were taking medication of some sort: 53 were taking haloperidol, 6 were taking haloperidol plus another medication, and 3 were taking other medications alone.

RESULTS

Interrater reliability was indicated by the proportion of agreement between patient and physician ratings for both methods of evaluating the clinical course ($p=.01$ by sign test) and by a coefficient of correlation for percentage agreement of .83.

Symptoms present at follow-up for all patients included the whole spectrum of symptoms known to characterize Gilles de la Tourette's syndrome. Forty-eight patients (62%) reported various facial tics, most commonly eye blinking and grimacing. Head and neck movements were the next most common, reported by 36 patients (46%). In descending order of incidence were arm and hand movements, 27 patients (35%); leg and foot movements, 23 patients (29%); whole body jerks, 10 patients (13%); and compulsive touching, 7 patients (9%).

Noises, including sniffing, barking, grunting, throat clearing, tongue clicking, and meaningless noises such as "oh," "eeh," and "uh," as well as actual words, were reported by 55 patients (71%). Coprolalia was present in only 13 patients (17%). Echolalia was reported by 3 patients. Other rare symptoms included spitting, biting of the lip, jumping in the air, turning completely around, head hitting, squatting, whistling, obscene gestures, palilalia, and echopraxia.

Thirteen patients were initially rated as mild. Five of these patients were taking haloperidol alone and stated that their symptoms had decreased by an average of 70.8%. The average dose of haloperidol for these 5 patients was 2.7 mg a day. Despite their self-rating of considerable improvement in symptoms, these patients gave themselves an average rating of 1.4 (between mild and moderate) in severity of illness. They reported an average frequency of symptoms of 1 every 15 minutes.

One of the 13 patients who were initially rated as mild reported a 99% improvement in symptoms. This patient was taking 20 mg of haloperidol plus 20 mg of diphenylpyraline hydrochloride a day and felt strongly that both medications were essential to his improvement. Three of the 13 patients reported complete remissions (2 for more than 1 year and 1 for 5 years) and were not taking any medication. Four of the 13 patients had discontinued taking any medication because of side effects and reported an average worsening of symptoms of 12.5%: 3 of these reported no essential change in their condition, and 1 reported a 50% worsening of symptoms.

Twenty-five patients were initially rated as moderate. Sixteen of these patients were taking an average dose of 5 mg of haloperidol a day and reported an average improvement in symptoms of 81.8%. Seven of these patients were also taking small amounts of anticholinergic medication along with the haloperidol. The average self-rating of severity of illness at the time of follow-up of all 16 of the patients taking haloperidol was 1.4 (between mild and moderate). These 16 patients also reported an average frequency of symptoms of 1 every 15 minutes.

Three of the 25 patients initially rated as moderate were taking haloperidol plus other medications; their average self-rating of improvement was 98%. Two of these patients were taking megavitamins plus 4 mg of haloperidol a day (these 2 reported a 95% and 100% improvement in symptoms), and 1 was taking 22.5 mg of haloperidol and 300 mg of thioridazine a day (this patient reported a 99% improvement in symptoms). Two of the 25 patients initially rated as moderate were taking medications other than haloperidol; these patients reported an average improvement in symptoms of 25%. One of these patients was taking 5 mg of fluphenazine a day and reported a 50% improvement, and 1 was taking 75 mg of tetrabenazine a day and reported no improvement. Four of the 25 patients were taking no medication at all: 1 reported a complete remission; 1 had improved 50% spontaneously; and 2 reported no change in their conditions (the average improvement for the 3 latter patients was 16.7%).

Twenty-nine patients were initially rated as marked. Twenty-three of these were taking an average dose of 13 mg of haloperidol a day and reported an average improvement of 80%. Fifteen of these patients also took anticholinergic medications, and 2 of them took 15 mg or 20 mg of methylphenidate a day because of drowsiness caused by haloperidol. The average self-rating for severity of illness of these 23 patients was 1.5 (between mild and moderate). The average frequency of symptoms among these patients was also in the range of 1 symptom every 15 minutes.

Two of the 29 patients initially rated as marked were taking haloperidol plus other medications; these patients reported an average improvement of 65%.

One had been very poorly controlled on haloperidol alone but reported an 80% improvement when taking 300 mg of lithium plus 50 mg of haloperidol a day. The other was taking 150 mg of tetrabenazine and .5 mg of haloperidol a day and reported a 50% improvement. Four of the 29 patients were not taking any medication; their average rating of improvement was 56.3%. Two of these patients reported an 80% improvement, 1 reported a 65% improvement, and 1 was unchanged.

Eleven patients were initially rated as severe. Nine of these were taking an average daily dose of 7.6 mg of haloperidol and showed an average improvement of 71.4%. The average self-rating of these 9 patients at the time of follow-up was 2 (moderate). Six of these 9 patients were taking anticholinergic medications. The average frequency of symptoms reported by the 9 patients taking haloperidol was 1 every 5 minutes.

One of the 11 patients initially rated as severe was taking alpha-methyl-para-tyrosine (AMPT) and reported a 95% improvement. Another of the 11 patients refused medication although he was severely affected by the syndrome; this patient reported no change in symptoms.

In summary, among the 78 patients there were 4 complete spontaneous remissions; 59 patients taking haloperidol alone or combined with other medications who showed an average improvement in symptoms of 79.3%; 3 patients taking other medications; and 12 patients taking no medication. The 15 patients not taking haloperidol showed a 24.7% average improvement. Table 1 presents a comparison of the self-ratings of patients who were taking haloperidol versus those of patients who were not.

Side effects that were bothersome to many patients were the major cause of discontinuing haloperidol. Of the 53 patients taking haloperidol alone or with anticholinergics, akinesia was reported by 51%, drowsiness by 40%, depression by 28%, akathisia by 26%, blurring of vision by 21%, and dyskinesia by 9%. Other side effects were poor concentration, forgetfulness, fatigue, insomnia, dizziness, slurring of speech, and nausea.

Three patients described episodes during which they experienced feelings of depersonalization and paranoia accompanied by slowed mentation. These episodes, which we termed "fog states," a name coined by the first patient to describe them, lasted anywhere from a few seconds to several hours. Although they sounded like a form of psychomotor seizure, we were not able to document this. These episodes were present only during treatment with haloperidol or, in one case, during treatment with phenothiazines or haloperidol. One patient ceased to experience these episodes after treatment with primidone in conjunction with haloperidol and tetrabenazine.

As length of treatment with haloperidol increased, the amount of improvement reported also increased. The 32 patients who took an average dose of 6.3 mg of haloperidol a day for less than 2 years (7–23 months) reported an average improvement in symptoms of 74.3%; the 14 patients who took an average dose of 16.9 mg a day for 2–4 years (24–47 months) reported an average improvement of 80.6%; and the 13 patients who took an average of 8.1 mg a day for more than 4 years (48–103 months) reported an average improvement of 93.4%. The dosage of haloperidol showed no consistent relationship with length of treatment or degree of improvement, although many patients, especially older ones, were able to decrease their dosage with increasing length of treatment (3).

TABLE 1
Ratings of Improvement Made by 59 Patients Taking Haloperidol Alone or with Another Drug and 15 Patients Taking Another Drug or No Drug, by Initial Physician Ratings*

Initial Rating	Haloperidol Alone or with Another Drug		Another Drug or No Drug	
	Number of Patients	Average Rating of Improvement, in Percents	Number of Patients	Average Rating of Improvement, in Percents
Mild (N=10)	6	75.5	4	−12.5
Moderate (N=24)	19	84.3	5	20.0
Marked (N=29)	25	79.3	4	56.3
Severe (N=11)	9	71.4	2	45.7

*The ratings of 4 patients who reported spontaneous remission of symptoms are not reflected in this table.

In addition to the 4 patients who were in remission without medication at the time of follow-up, 1 patient reported a 3-year remission followed by return of symptoms. Five other patients reported brief periods of remission lasting up to 6 months, and 1 patient reported being completely asymptomatic during and for several months after a pregnancy. Many of the patients had asymptomatic periods while taking medication. Sixty-nine of 74 patients who were symptomatic at the time of follow-up (93.2%) told us that periods of emotional stress caused a worsening of symptoms. Eleven patients (14.8%) also mentioned that their symptoms increased when they were relaxing at home. Patients over 30 years old showed less fluctuation in symptoms.

Signs of organic impairment had been evaluated in three ways in 59 of the patients when they were originally seen: abnormalities on EEG, abnormalities on neurological examinations, and signs of organicity on psychological testing (6–8). Thirty of the 59 patients (50.8%) showed positive signs of organicity on more than one of these tests. Twenty-nine patients (49.2%) showed signs of organicity on none or only one of the tests. Twenty-two of the 59 patients were taking haloperidol or other medication. There was no significant difference in response to medication between the group with signs of organicity on two or more tests and those with no signs of organicity or signs on only one test. Nineteen patients were not given all three tests.

We found no correlation between age at onset of ill-

ness or family history of tics and response to treatment.

CONCLUSIONS

In spite of the wide disparity in signs and symptoms among the patients in our study, we have not been able to find any significant clinical difference in natural history or types of symptoms that might be meaningful for prognosis. The slightly better response to treatment of patients initially rated as either moderate or marked is not statistically significant and most likely represents a lack of fine discrimination on the part of both physicians and patients.

It is clear that haloperidol is an effective drug for the treatment of Gilles de la Tourette's syndrome. It still appears to be the most effective medication available (1–3, 9). Its effectiveness, however, is severely hampered by side effects that often force patients to compromise between maximum relief of symptoms and minimum discomfort from side effects or to discontinue the drug completely and live with their symptoms, however disabling they might be. Other medications that we have used during the past several years include many of the antipsychotic phenothiazines, pimozide, tetrabenazine, AMPT, lithium, imipramine, amitriptyline, deanol, methysergide maleate, diazepam, diphenylhydantoin, disulfiram, propranolol, and L-tryptophan. Although some improvement has been seen with tetrabenazine and AMPT (10), it has been sustained in only 1 patient on each of these medications.

Either before coming to us or during the time of follow-up, many of the patients tried such diverse treatments as acupuncture, allergic desensitization, various diets, hypnotherapy, ECT, behavior therapy, and psychoanalysis. Some are still receiving psychotherapy in conjunction with haloperidol. Contrary to the literature, which contains only single case reports (11, 12), we have not seen any substantial improvement through psychotherapy alone in our group of 78 patients.

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The Concept of Drug Automatism

BY MICHAEL I. GOOD, M.D.

The drug-automatism hypothesis implies a medication-induced absence of intentionality for self-poisoning and a relative amnesia for serial or single overdosage. Controversy stems from problems encountered in the formulation and verification of the hypothesis. The author reviews the literature, presents a case associated with a proprietary sleeping preparation, and discusses psychopharmacological and psychophysiological elements in the mechanism of drug automatism and its differential diagnosis.

IN 1934 RICHARDS (1) employed the idea of automatism to explain three cases of barbiturate overdosage in which the patients claimed amnesia for taking more than 2 tablets. He noted that 8–10 pills evidently were taken, possibly at intervals, and attributed the phenomenon to barbiturate toxicity. Since then the automatism hypothesis has frequently been used to account for potentially accidental deaths or equivocal suicides due to barbiturate ingestion. However, it is difficult to confirm the hypothesis directly. The existence of drug automatism as a clinical entity is a question of controversy and significance, not only because of the medicolegal and actuarial implications of determining mode of death but also because of the apparent deviation from a strict psychic determinism.

The term "automatism" refers to nonreflexive, directed, and apparently purposive motor behavior performed without full consciousness of what is being done and followed by grossly incomplete recollection or insight. The act may be complex, repetitive, or stereotyped and show lack of judgment or appropriateness. It occurs in such conditions as epilepsy, head trauma, sleep disorder, neurosis, psychosis, personality disorder, intracranial disease, delirium, and intoxication. More than memory is affected even though amnesia may be the only residual sign of prior alteration of consciousness. Automatic behavior may or may not appear meaningful in terms of usual personality, defensive structure, and unconscious impulses, although it is often considered to be an expression of an underlying wish or fear. Alternatively, the behavior can be described operationally in terms of homeostatic tendencies and learned response patterns.

In Richards' original hypothesis, "the knowledge of the need for another tablet persists, while the memory is so affected by the drug that the patient does not realize that he has already satisfied the need, and automatically repeats it at intervals" (1). Ettlinger and Flordh (2) found 27.8% of 500 cases of presumed attempted suicide to be due to "serial consumption" of drugs, a process that can be equivalent to or lead to automatism. Jansson (3, 4) classified 25.4% of 488 varied drug ingestions as automatism cases, which he also defined in terms of serial consumption. The syndrome is widely accepted by physicians and repeatedly described by people who apparently are uninformed about the concept (5–7). On the other hand, some authors have considered the hypothesis a myth based on an erroneous explanation used by patients, relatives, and physicians to rationalize intentional self-poisonings. These patients presumably have unconsciously denied or repressed their true intent to protect against the painful recognition of self-destructive tendencies (6–10). Cases reportedly demonstrating fallacies in the hypothesis, however, have exhibited patent psychopathology, alcoholism, or chronic drug use. Such cases are readily subject to psychodynamic interpretations and do not disconfirm the hypothesis.

The literature lacks clarification of the drug-auto-

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matism hypothesis, specific case reports, and discussion of elements of the syndrome. The following is a case of overdosage of the proprietary sleeping preparation Sominex (each tablet contains 0.25 mg of scopolamine aminoxide hydrobromide, 25 mg of methapyrilene hydrochloride, and 200 mg of salicylamide). It is consistent with the following hypothesis: given predisposing conditions, an initial therapeutic dose of medication taken with or without repetitions can induce a toxic dissociative or delirious state, leading to single or cumulative excessive ingestion that is not a conscious or unconscious attempt at self-poisoning.

CASE REPORT

Police brought a 60-year-old woman to an emergency ward at 7:00 a.m. after she anxiously told her neighbors she had taken "too many Sominex." She was drowsy on arrival and became increasingly somnolent, soon arousable only to deep pain. Blood pressure was stable, pupils were dilated and fixed, and ankle clonus with extensor plantar reflexes was present. Nasogastric lavage yielded only blood-tinged fluid that cleared in a few hours. Lumbar puncture was normal, and a drug screen supported Sominex ingestion. Over the next 24 hours, following a period of disorientation during which she picked at her sheets and spoke incoherently about "bugs in bed," she became fully awake and had a normal neurological examination.

The consulting psychiatrist reported accidental ingestion of about 10 Sominex tablets. For many years the patient had experienced occasional difficulty falling asleep and would read to induce drowsiness. Her sleep difficulty had worsened over the past several months, and she had just purchased a bottle of Sominex. The night before admission she reportedly took two tablets at bedtime and fell asleep, later ingesting more in a soporific state as if "in a dream" that she could barely recall. Some time later she awoke with a high-pitched ringing in her ears and was alarmed when she saw the uncapped, half-empty pill bottle.

She consistently denied suicidal intent, and she had no psychiatric or overdosage history. She used no other drugs, including alcohol, except for occasional, moderate social beer consumption. She had worked as a waitress for years and lately as a cashier. Six and a half years ago her husband had died of a heart attack. Four months prior to admission she had quit work because of dissatisfaction with her duties and salary. A parsimonious woman, she had sufficient bank savings to leave work temporarily and was considering a move to a more modest residence. For a few months she had experienced fatigue, irritability, a 10- to 15-pound involuntary weight loss, and occasional difficulty in concentrating, yet she continued to enjoy reading. She had no anorexia or bowel changes.

In the hospital she was nonsuicidal and unimpaired in memory and cognitive function. The initial diagnosis was overdosage due to drug automatism with mild involutional depression, and she pursued a referral for psychiatric follow-up. Curious about how the ingestion could have happened, she neither transmitted nor reported a sense of depression but could conceive of depression causing her various symptoms. A primarily psychiatric diagnosis for her disorder was questioned, however, when further history revealed that three months previously, as well as several years earlier, she had fainted in the bathroom and struck her head in falling without evidence of prolonged loss of consciousness. She had occasional mild headaches but no discernible signs of significant head injury. EKG, EEG, brain scan, and routine blood studies were normal.

In the absence of positive medical findings and with the question of "masked" depression, she was followed psychiatrically over a six-month period. During this time she gained weight and strength, resumed work, and decided to stop treatment because she felt fine. She formed a therapeutic relationship, presented dreams, and explored losses. Although an impression of atypical depression might be inferred, there was no manifestation of underlying suicidal trends. The possibility of covert alcohol or barbiturate use was never in evidence and seemed unlikely.

DISCUSSION

Cerebral Organic Conditions

Depression notwithstanding, given the patient's history of head trauma followed by fatigue, irritability, insomnia, subjective difficulty concentrating, weight loss without anorexia, and lack of significant depression, it is necessary to consider the diagnosis of posttraumatic syndrome (11). This syndrome may predispose to drug automatism. It can follow even minor head injuries and is characterized by headache, dizziness, insomnia, irritability, fatigue, depression, vasomotor instability, and intolerance to intoxicants. The symptoms can arise in people with a previously normal life adjustment (11).

Jansson (3) noted a clearly higher proportion of cerebral lesions or suspected cerebral organic conditions among the automatism cases in his population. Not less than 49.2% of these 124 cases had such diagnoses as alcoholism, narcomania, epilepsy, and senile dementia, compared with only 24.5% of the control cases. He concluded that these conditions predispose to confusional states with tranquilizers and barbiturates, and he briefly described a case of apparent automatism with serial consumption of meprobamate. In contrast to the incidence of genuine suicidal behavior, the incidence of automatism cases showed no seasonal variation (4).

Goldings (12) described an unpublished case of automatic barbiturate overdosage (nonlethal) in a 49-year-old businesswoman who developed insomnia associated with work concerns. There was no indication of suicidal intent, and she had a history of definite concussion. Stroo's patient (13), who had a history of inebriety, stumbled, hit his head, and could not sleep, after which he progressively ingested 12 mg of scopolamine and developed a psychotic delirium.

Alcohol-, barbiturate-, and other drug-withdrawal states can also predispose to automatism. Withdrawal symptoms leading to use of a new sleeping preparation may potentiate toxic drug effects or may be exacerbated by paradoxical drug effects. Advancing age is another predisposing factor. Psychotropic drug use

in the elderly can have serious side effects either secondary to pathological changes common to this population or due to the natural aging process (14). Aitken and Proudfoot (6) found that patients denying an attempt at self-poisoning despite evidence of overdosage are statistically more likely to be over 40 years old.

Behavioral Toxicity and Sleep

Over-the-counter sleeping preparations can cause acute psychosis with amnesia (15). Surprisingly, considering its components, Sominex has not previously been noted in the psychiatric literature as a drug with the potential to induce automatism. Therapeutic doses of scopolamine ranging from 0.3 to 0.8 mg can produce paradoxical reactions of agitation, hallucinations, and delirium (16). In a psychological study of subjective drug effects, Haertzen (17) observed that scopolamine hydrobromide in doses of 5.0–7.5 μg/kg caused a feeling of impaired memory. Stroo (13) considered that this amnesia for the amount of medication taken could lead to unwitting intoxication; he felt that an amnesia-related sense of futility differentiates such intoxication from a true suicide attempt even though avoidance of depression is sought. Other authors (16) noted the apparent lack of relationship between scopolamine-induced reactions and psychiatric history.

Methapyrilene also has anticholinergic activity (18). Antihistamines can cause central nervous system stimulation or depression, and symptoms of intoxication may be indistinguishable from atropine (or scopolamine) poisoning (16). Usually paradoxical effects arise only with higher doses. Idiosyncratic excitement and delirium also occur with barbiturates (19).

The sedative effect of over-the-counter sleeping preparations is unreliable and tends to disappear with regular use. The decrease in REM sleep is noteworthy. When experimental animals receive centrally acting anticholinergic drugs in sufficient doses, the EEG and behavioral signs of sleep become dissociated—the EEG exhibits a sleep pattern while the behavior indicates wakefulness, often with restlessness and agitation (19). An apparent toxic dissociative state occurs that may differ from other types of delirium and resemble the syndrome of "sleep drunkenness." Bonkalo (20), in reviewing "sleep drunkenness" and violent automatisms of sleep, indicated their association with partial arousal from non-REM sleep. These cases are hypnopompic (not hypnogogic), often associated with sleep deficit and sedative or alcohol use, and followed by recognition of the results of the behavior with appropriate affect, perplexity, absence of denial, and total or partial amnesia.

Delirium and Information Processing

Toxic delirium with automatism may arise from a single standard dosage or from a more complex pattern of serial consumption. Authors since Richards have limited their definition of automatism to serial consumption, which is probably associated with previous barbiturate addiction. Reasons for intentionally repeated or increased dosage include impatience and disregard of time, marked psychic symptoms, tolerance or cross-tolerance with alcohol or other drugs, slow absorption and delayed effects, simple lack of sedative or soporific response, and paradoxical effects (2, 3, 21). Gradual or sudden appearance of excitatory effects at higher concentrations may accelerate or exaggerate the pursuit of relief, with supervening delirium. True automatism may then occur, leading to unintentional single or serial consumption, as if to relieve the very toxic state the drug has induced.

Lipowski (22), in reviewing the perceptual, conceptual, and behavioral impairments in delirium, listed repetition, perseveration, stereotypy, misinterpretation, and overinclusion. The level of consciousness characteristically fluctuates, and EEG changes vary with the mode of altered consciousness. West (23) described the neurophysiological and psychophysiological substrates of dissociative states in terms of information processing. Particularly relevant is the "all or none" nature of information processing by nonconscious, paleocortical structures. In addition, sleep deprivation and a drug-induced alteration of field articulation can cause an undifferentiated, global perception and information processing (24, 25). Impaired field articulation can blur distinctions among dosages, number of tablets, and time intervals, particularly in the absence of another person.

The lack of reports of observed cases of drug automatism may be partly accounted for by the influence of an observer on field articulation, perhaps more so in field-dependent individuals. Even so, many physicians are familiar with examples of inappropriate ingestion of substances by hospitalized patients in a toxic delirium. Finally, the argument that serial consumption of potentially lethal sleeping pills cannot cause death because the patient would first fall asleep (7) fails to consider the fact that metabolic tolerance to hypnotic effects can exist without significantly altering the lethal concentration (19).

Amnesias and Altered States

In considering alternative hypotheses to explain amnesia for overdosage, Dorpat (7) noted that memory loss after regaining consciousness need not have existed at the time of ingestion or while the drug was active. According to this retrograde amnesia hypothesis, the patient is fully aware of overdosage at the time of ingestion but develops a loss of memory due to the drug for events prior to sleep or coma. In contrast, the drug-automatism hypothesis specifies an alteration of consciousness at the time of overdosage but also incorporates the possibility of additional retrograde amnesia. In the absence of an observer at the time of ingestion, it is difficult to distinguish anterograde from retrograde amnesia. Memory of taking an initial dosage is sufficient to suggest, but not to establish, automatism as an alternative to simple retrograde amnesia. Denial, repression, malingering, or retrograde amnesia may account for total absence of recall for any ingestion.

It is important to distinguish denial of the act of overdosage and denial of the motive of suicide. Aitken and Proudfoot (6) made this distinction belatedly in their study of barbiturate automatism: among patients seen for barbiturate poisoning, they selected for further investigation those who either denied the act of self-poisoning or claimed it was due to automatism. Unfortunately, they dropped about half of 69 cases from further consideration because these "miscoded" patients actually had denied the motive of suicide rather than the act of self-poisoning and thus did not meet the initial selection criteria. This elimination of relevant cases probably helped to confirm their conclusion that barbiturate automatism is a myth.

In some instances, the use of amytal or some other hypnotic during an interview may yield a reconstruction of the forgotten event. State-dependent learning and recall have been studied mainly with alcohol. Such studies suggest that 1) recollection depends in part on being in a physiological state like that in which the memory registration occurred and 2) memory impairment depends on the level of intoxication at the time of registration (26).

In an altered state of consciousness, it is possible to manifest intentional or uncontrolled suicidal behavior that is absent outside of that state (7, 27). Ettlinger and Flordh (2) implied this when they described serial consumption making the patient "maudlin" and "dulling his wits" so that "any thought of suicide will be less restrained." Such state-dependent affective behavior should be distinguished from drug automatism in terms of the purpose of the act and the nature and degree of consciousness in the state. However, it is not clear whether state-dependent behavior and toxic dissociative states always differ. The neurophysiological characteristics of various altered states of consciousness await further elaboration. On the basis of available clinical data, it is impossible to rule out the chance that the patient described in this paper ingested an overdose in a state-dependent, otherwise ego-alien attempt at self-poisoning. Nevertheless, insofar as state-dependent behavior is induced by the agent taken, it should be classified along with drug automatism as a behavioral toxic effect of medication.

CONCLUSIONS

Depression and suicidal intent must be considered in apparent cases of drug automatism or accidental self-poisoning. However, consciously or unconsciously motivated suicidal intent need not exist, even though there may be evidence of pharmacological mood alteration or sleep disturbance leading to drug use (a symptom of depression). Attempted suicide (the motive) may be different from self-poisoning (the act). True drug automatism has psychopharmacological and psychophysiological determinants that should be distinguished from psychodynamic features. Increased age, preexisting or suspected cerebral organic conditions, and addiction are commonly associated with drug automatism, which may be preceded by sleep or altered wakefulness. The potential danger of the syndrome is another reason why proprietary sleeping preparations should be subject at least to prescription control, a recommendation made by other authors (16). Physicians prescribing barbiturates should consider automatism as a potentially lethal complication.

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Red Blood Cell Catechol *O*-Methyltransferase and Response to Imipramine in Unipolar Depressive Women

BY JONATHAN R.T. DAVIDSON, M.B., B.S., MALCOLM N. MCLEOD, M.D., HELEN L. WHITE, PH.D., AND DAVID RAFT, M.D.

When baseline red blood cell catechol O-methyltransferase (COMT) was measured in 15 unipolar depressive women, the authors found a linear correlation between COMT and response to imipramine (best outcome occurring at low COMT). The results of this study were not related to such variables as intensity of depression, family history, or psychiatric history. The authors suggest that this assay may be useful either as a predictor of response to the drug or as a guide in choosing the optimum dose.

TRICYCLIC ANTIDEPRESSANTS are valuable in the management of depressive illness, but according to various estimates they only help certain patients (1, 2). Even when they help, the depression may not remit fully. In a trial of continuation therapy with tricyclic drugs (3) approximately 40% of the patients required alternative treatment because of an unsatisfactory initial response, even with relatively high doses. Depression is a common disease that can be fatal if improperly treated, yet response to treatment is seemingly capricious. Consequently, several workers have attempted to establish response criteria (4, 5).

Wittenborn and associates (6) demonstrated that tricyclics do not help patients with dependent personalities. In addition, plasma levels of drugs may be as significant as the clinical picture; a pharmacokinetic study (7) has shown marked interindividual variation in levels of nortriptyline at an identical dose. Kragh-Sorensen (8) indicated a relationship between relapse during maintenance therapy and low plasma levels of nortriptyline, but whether or not these levels really correlate with clinical response is a subject of debate (9–12). Glassman and associates (13) emphasized the importance of distinguishing between free (active) and bound (inactive) fractions of the drug in an attempt to clarify this problem. Some researchers claim that pretreatment urinary 3-methoxy-4-hydroxyphenyl glycol can be a useful indicator of response to antidepressants; a high value would suggest a good response to amitriptyline, and a low value would indicate a good response to imipramine (14). Rosenblatt and Chanley (15) found that the ratio of amine to oxidized metabolites varied from 22% to 85% among 6 subjects on a fixed dose of imipramine, which suggests a four-fold variation in the inhibition of amine reuptake following drug therapy. The finding of Prange and associates (16) that thyroid-stimulating hormone can augment the response to imipramine in women implies important roles for both endocrine status and sex of the patient.

The principal mechanism by which tricyclics relieve depression is generally considered to be inhibition of amine reuptake at the synapse (17). If tricyclic antidepressants reduce or eliminate this important route of degradation, amine breakdown by catechol *O*-methyltransferase (COMT) may become more important in the central nervous system (CNS) (18) than it is generally considered. This is consistent with the finding that there is an increase in such methylated products as nor-

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metanephrine after tricyclic administration and a decrease in oxidized products mediated via monoamine oxidase (19). COMT is present in the freely accessible red blood cell and in animals it is similar to COMT in other tissues (20). Since this finding is not conclusive for humans, one cannot confidently generalize any findings of red cell COMT activity to its behavior within the CNS. COMT is closely associated with adrenergic receptors (21) and would therefore become relatively more important within the CNS after imipramine therapy, which produces less reuptake of norepinephrine and an increased amount of this amine at the receptor site (22). Cohn and associates (23) demonstrated that COMT activity does not alter in depressed women after they recover and that it is not related to tricyclic drugs, other therapies, nutrition, or menstrual cycle (23).

METHOD

Fifteen unipolar depressive women between the ages of 23 and 69 (mean=42.2 years) were treated with imipramine on a double-blind randomized basis, as part of an evaluation of antidepressants. The starting dose of the 12 inpatients of 25 mg/day of imipramine was increased by 25 mg/day for 5 days to a total daily dose of 150 mg, at which level it remained for an additional 16 days. The 3 outpatients received imipramine for 5 weeks but were only on the full dose (150 mg/day) for the final 3 weeks. The mean length of illness was 20.4 months, with a range from 2 to 84. Using specific criteria (24), we classified 12 patients as neurotic depressive and 3 as psychotic. None of the patients gave a personal or family history suggestive of mania, but 6 subjects had alcoholic or sociopathic relatives, and 1 patient gave a history of suicide in the family. Five patients had had no previous depressions, 4 had one, 2 had two, and 4 had five or more depressive episodes. Informed consent had been obtained prior to treatment in all cases. Clinical ratings were made weekly using Hamilton's and Beck's rating scales, but we will report only pretreatment and terminal scores in this paper. Clinical change is represented by the difference in the raw scores between the two points: a decrease in score indicates improvement, and an increase indicates worsening.

The assay is described in detail elsewhere (25), but we will present a brief description here. Blood specimens were drawn before the initiation of tricyclic therapy in the 12 inpatients, whereas the 3 outpatients had completed a course of imipramine therapy and had been on no psychotropic medication for at least 2 weeks at the time blood was obtained. The inpatients received flurazepam at night as needed. Blood (10 mg) was drawn into plastic syringes containing ethylenediaminetetraacetate, and the red cells were obtained no more than 3 hours afterward. The whole blood was centrifuged, and the red cells were washed in saline, centrifuged again, and lysed. The total amount of COMT was measured (95% is soluble and 5% is membrane bound, according to unpublished observations from our laboratory). A 0.1-ml portion of lysed red blood cell suspension was assayed at pH 7.9, using 0.1 mmol/liter of [^{14}C]methyl-*S*-adenosyl-L-methionine and 2 mmol/liter of 3,4-dihydroxybenzoic acid as substrates, making a total volume of 0.41 ml that also contained 50 mmol/liter of Tris-HCl, 3 mmol/liter of magnesium chloride, and 0.5 mmol/liter of dithiothreitol. COMT activity is described as nanomoles of 4-hydroxy-3-methoxybenzoic acid per hour per milliliter of red blood cells. Cohn and associates (23) have shown that COMT does not alter during the course of depressive illness or after tricyclic drugs have been given; although we did not test this in our sample, 2 female patients who were later treated with imipramine showed no change in this enzyme before and after treatment. We have also shown that COMT activity is not significantly different among normal individuals, primary depressive patients, and secondary depressive patients but is elevated in schizophrenic patients (25).

RESULTS

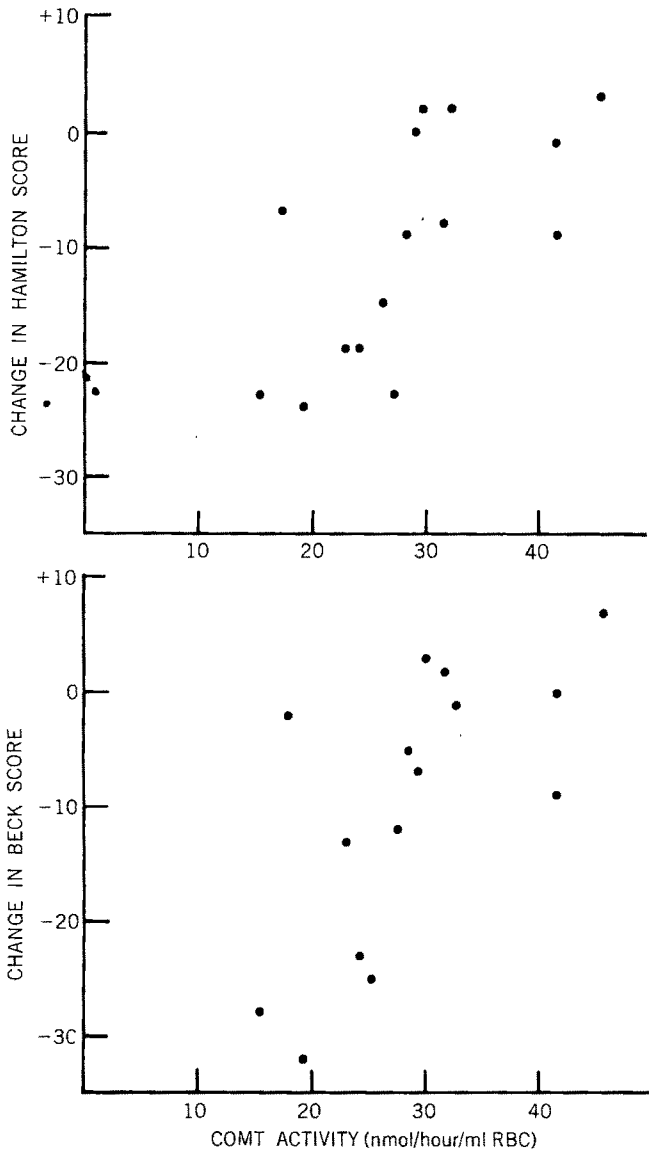
Figure 1 shows that the correlation between baseline COMT activity and clinical change on both depression rating scales is highly significant (Spearman rank-order correlation coefficient=.7, $p<.001$, two-tailed t test). The relationship is linear, i.e., lower COMT corresponds with a better response to imipramine. It should be emphasized that the clinicians were ignorant of COMT activity when rating subjects, and the pharmacologist (H.L.W.) who performed the COMT assays remained unaware of the response to imipramine.

The results indicate that only 3 of 7 patients in the high COMT group (above 29.0 nmol/hour/ml of RBC) improved, whereas all 8 patients in the low COMT group improved considerably. This finding is applicable to both rating scales. There is no difference between these two groups in numbers of previous depressions or in family history. The mean pretreatment scores did not differ significantly (Hamilton Scale=27.1 and 26.0 for high and low COMT groups, respectively; Beck Scale=29.1 and 27.9 for high and low COMT groups, respectively). Therefore, in our sample neither COMT activity nor response to the drug is related to details of family history, previous history, or intensity of the illness.

DISCUSSION

There are several implications that arise from our findings. First, this relatively simple assay could become a predictor of imipramine responsiveness in the dose range we used, at least in women. Second, if COMT is related to the outcome of therapy, it should be taken into account when designing clinical trials of

FIGURE 1
COMT Activity and Change in Score on the Hamilton and Beck scales



imipramine; COMT, along with such other factors as sampling, dose used, duration of treatment, etc., may account for some of the variability in effectiveness. For example, there are reports that imipramine is ineffective in neurotic depression (4, 26), yet we found that if COMT is low, the drug works well for this category of patient. It could be maintained that a maximum dose of 150 mg of imipramine is not enough, given the known variation of plasma levels at a fixed dose (7). Plasma levels are not available to answer the question at this point, but it is possible that higher doses would be required if red cell COMT is high, and when higher doses are employed, imipramine is uniformly effective, regardless of COMT. If that were the case, COMT could still be valuable as a guide to the optimum dose of drug required, thereby shortening the recovery time. Although 150 mg of amitriptyline is considered to be enough in treating outpatients (27), our predominantly inpatient group may require higher doses. We suggest that further work on this matter is needed. An alternative approach would be to develop a nontoxic inhibitor of COMT to be used in conjunction with imipramine in treating "high COMT" depression.

Recent work (28) suggests that it is feasible to consider the clinical picture of depression as being produced either by low amine output or by lowered sensitivity at the receptor. It is interesting to speculate that low COMT might correspond with the latter type and that tricyclic drugs, by blocking reuptake, would render more agonist available at the receptor site with ensuing improvement. On the other hand, a condition of low amine output may respond better to drugs that increase output or reduce breakdown, such as the monoamine oxidase inhibitors (18).

We hope to prepare a later report which should cast more light on the relative roles played by such factors as plasma level of drug, depression subtype, and COMT in the response to imipramine. Another area not yet examined is the role played by the sex of the patient: our results apply to depressed women, and we lack adequate data to express views on the importance of COMT in depressed men.

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Therapeutic Effects of Methadone and *l*-α-Acetylmethadol

BY ELAINE KARP-GELERNTER, PH.D., LEON WURMSER, M.D., AND CHARLES SAVAGE, M.D.

Many heroin addicts prefer methadone maintenance treatment to l-α-acetylmethadol (LAAM) because of the "rush-like" effect of methadone. Although there have been no observable differences in the safety and effectiveness of the two drugs, LAAM appears to lead to a more stable, consistent physiological state. The authors report on two patients who had ego defects characterized by severe mood swings. Both patients preferred LAAM to methadone because of its stabilizing effect and smoother action.

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METHADONE MAINTENANCE, introduced into clinical practice by Dole and Nyswander (1), is the most widely used form of treatment for heroin addiction at this time. Although there is considerable debate about the virtue of a substitute addiction, methadone's positive physiological and psychological effects have been well documented. It is at least as safe as heroin, longer acting, and legal. Dole and Nyswander postulated that methadone provides an answer to the "heroin hunger" induced by a specific metabolic defect. Using clinical evidence, Wurmser (2) found methadone to have not only a substitute action but positive psychotropic effects. Specifically, he noted that in all the patients he has studied in intensive psychotherapy (now 20 cases), "very intense feelings of murderous rage and vengefulness, or of profound shame, embarrassment, and almost paranoid shyness, or of hurt, rejection, and abandonment were discovered. . . . In all of them these feelings of rage, shame, and hurt were reduced as soon as they were on methadone. In a few of them they disappeared altogether; in some they still occurred occasionally but had a less overwhelming quality."

One obvious objection to methadone is that its action is limited to approximately 24 hours, requiring either daily attendance by the patient at a methadone maintenance clinic or the use of take-home medication. The former results in an induced dependence on

the clinic, and the latter affords the possibility of methadone diversion into the black market.

Studies of *l*-α-acetylmethadol (LAAM) are being carried out in the hope of overcoming the objections to methadone. The results of a recently completed comparative study of methadone and LAAM on 99 heroin addicts from whom informed consent had been obtained indicated no observable differences in the safety and effectiveness of the two drugs (3). There was, however, a differential psychological effect. More patients preferred methadone to LAAM because of the familiar "rush-like" effect of methadone that occurs within 2 hours of ingestion. LAAM is followed by no such effect and appears to be a smoother acting medication, leading to a stable, consistent physiological state. Two patients, however, showed a decided preference for LAAM. Upon completing 6 months of participation in the double-blind study (3 months on each drug), both patients (who were able to discriminate between the two drugs because of the "rush") requested LAAM maintenance. We will devote the remainder of this paper to clinical reports of the reactions of these two patients to methadone and LAAM treatments.

CASE REPORTS

Case 1. Mr. A is a 30-year-old heroin addict. He is married and lives with his wife and young child. He completed 2 years of college but has had an erratic employment history. Although trained in computer programming, he never held a job in that capacity. The patient has a psychiatric history of impulsive rage reactions and episodic aggressive behavior along with paranoid symptoms.

His life has been replete with incidents in which he either passively witnessed or actively engaged in violent assaultive activities. His initial experiences with strife started with his family; his parents argued violently. When he was 5 years old, he saw a playmate killed by a truck. Sometime later he witnessed a neighbor commit suicide by jumping out of a window. At 15, he and his friends were taunted with snowballs, and one of his friends stabbed two of the attackers to death. About 4 years later, the patient, having been to some degree provoked by this same friend, shot and killed him. Diagnosed as having a dissociative reaction, he was acquitted from the first-degree murder charge on the grounds of temporary insanity. Shortly thereafter, the patient turned to a homosexual liaison and narcotics. The narcotics had several effects—they muted the shame about his homosexual experience, soothed his despair, and most of all calmed the attacks of terror, guilt, and the welling of murderous rage. Historically, whenever he withdraws from narcotics, his feelings of anxiety and rage become unmanageable.

Our contacts with this patient began after he was arrested for breaking and entering. He was treated at a state hospital, where he was detoxified and released with the recommendation that he receive psychiatric treatment. With a poorly developed ego and a fragile ability to cope, he entered current treatment, which consists of methadone maintenance, drug counseling, and intensive psychotherapy.

Before entering this treatment the patient had used drugs for 10 years and had 10 previous treatments for addiction. He found methadone maintenance only minimally useful and described his acceptance of it with bitter resignation. With methadone he suffered daily fluctuations in mood (ranging from restlessness, extreme irritability, and inability to function) along with a variety of physical symptoms directly related to the number of hours since his last dose of methadone. He stated that he could not function until he received his medication and was constantly attuned to the clock, but he found the rush-like experience that followed his consumption of methadone equally intolerable. He felt that physically and emotionally he remained like a heroin addict and described his daily symptoms as similar to the withdrawal symptoms from heroin addiction. He resented his total dependence on medication and the clinic and repeatedly attempted to free himself from them via detoxification. However, he was unable to remain drug free and found it necessary to return to methadone treatment.

He volunteered to participate in this study in the hope that LAAM would obviate the untoward effects of methadone. When he was treated with LAAM, Mr. A's social, employment, and program status remained stable. He appeared to be better adjusted emotionally and expressed satisfaction with the effects of LAAM. He was transferred after 3 months of LAAM treatment to methadone, at which time his emotional adjustment seemed to deteriorate—he became less cooperative and more unreasonable. His symptoms flared; he expressed impulses to act hostilely, showed paranoid ideation, and was concerned that he would be unable to meet scholastic requirements. He complained about the medication, stating that it was the "same old methadone," and requested that he be placed on LAAM. He reported that while he was on LAAM he did not feel like a drug addict and felt normal for the first time since becoming addicted. He felt better physically and emotionally and was less moody, anxious, tense, and irritable. After a variance in study procedure was obtained, he was returned to LAAM maintenance and again coped effectively.

Case 2. Mr. B is a single man in his mid-20s who lives with his parents in an openly hostile and problematic relationship. Diagnosed in the past as having schizophrenic reaction (chronic undifferentiated type), his symptoms included severe somatic complaints and impulsive behavior. When he entered methadone treatment (1 year before entering the study), psychiatric intervention was recommended and was initiated but not maintained as a continuous part of his treatment. He was, however, treated concurrently with tranquilizers.

His first reactions when placed on LAAM were malaise, headaches, and anxiety about the medication. Nevertheless, he did not request termination from the study, and these symptoms abated spontaneously. During this time his counselors, nurses, and staff noted diminished severity of symptoms and charted overall improvement. When he was transferred back to methadone, his somatic symptoms flared. He exhibited bizarre behavior, threatened the life of his counselor, and set fire to his desk. The combination of tranquilizers, methadone, and psychiatric intervention calmed him somewhat.

After completing this study, Mr. B requested LAAM maintenance. His reasons were similar to those of Mr. A—on LAAM he felt more comfortable, better adjusted, less like an addict, and less irritable. He too suffered less from intolerable fluctuations in mood and body state. The addition of tranquilizers to methadone treatment did not alleviate these daily shifts in physical and psychological symptoms. LAAM appeared to have the ability to regulate the patient's well-

being better than the combination of tranquilizers and methadone. When he returned to LAAM maintenance, the patient's functioning improved and he voluntarily gave up the use of tranquilizers.

Both patients can be characterized as having moderate to severe ego disturbances and extreme problems with impulse control. To them, methadone, although preferable to abstinence, had severe limitations. Although it controlled heroin craving, it did not alleviate emotional or physical symptoms. LAAM proved to be a more effective chemotherapy for both patients—they felt more normal and stable under this regime than under methadone maintenance.

SUMMARY

Methadone maintenance may be an effective adjunct for patients with ego defects characterized by severe mood swings and inability to control feelings of rage and aggressive impulses. Although it is premature to generalize about the specific psychotropic action of LAAM, the clinical data on two patients suggests that, because of its stabilizing effect and smoother action, LAAM may provide an even more viable form of treatment for such heroin addicts. At the same time, its lack of a "high" may make it less attractive for the patient to whom euphoria is more important than impulse control.

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Adolescent Parricide: A Comparison with Other Adolescent Murder

BY BILLIE F. CORDER, ED.D., BRENDA C. BALL, PH.D., THOMAS M. HAIZLIP, M.D., ROBERT ROLLINS, M.D., AND RALPH BEAUMONT

The authors examined the available data for 10 adolescents who had been charged with parricide and compared these with data for matched groups of 10 adolescents charged with murdering another relative or a close acquaintance and 10 charged with murdering a stranger. They found significant differences between parricidal adolescents and other homicidal adolescents on personality, family, social, and follow-up adjustment variables.

MANY OF THE STUDIES of environmental and psychological characteristics of adolescents who have committed parricide have been based on the case studies of 1 or 2 adolescents (1–3). There have been no controlled comparisons of parricidal adolescents with matched groups of adolescents who committed other types of homicide. Follow-up of parricidal adolescents has also been rare. Only one study reported post-treatment follow-up of homicidal adolescents (4); the authors found that 1 boy who attempted to kill his parents was returned to his home.

Lander and Schulman (5) hypothesized that acting out of intense hostility engendered by destructive parent-child relationships occurs along a continuum. They saw parricide as a culmination of intense neurotic conflict and other murders as characterized by simple, primitive acting out by impulse-ridden personalities; therefore, parricide and other murder are committed by persons at different points along a spectrum of ego structure and development.

Objective comparisons of factors present in different types of homicide committed by adolescents have not been reported. Many observations and generalizations on parricide have been based on groups of case histories that included adolescents who only threatened homicide as well as those who attempted homicide unsuccessfully (4), even though Sendi and

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Blomgren (6) indicated that adolescents who threatened or attempted homicide might have been significantly different in many personality and environmental history characteristics from those who actually committed homicide.

Behavioral observations of adolescents who committed parricide have been combined with observations of those who murdered other relatives or close acquaintances in most studies of murder by adolescents (7, 8). This further complicates any clear picture of adolescent parricide. Little definitive information is available from research studies to establish whether adolescents who commit parricide are significantly different in personality characteristics, environmental factors, and posttreatment adjustment from adolescents who murder other relatives or total strangers.

In this paper we aim to present and compare data on 30 adolescents charged with murder: 10 were charged with parricide, 10 were charged with the murder of a relative other than their mother or father or of a close acquaintance, and 10 were charged with the murder of a person whom they had not known. We applied selected personality, family, and environmental variables as well as follow-up variables on behavioral adjustment in comparing these three groups.

The following questions were explored: 1) Do these group comparisons support the idea of a spectrum of differences in ego structure and development of impulse control among adolescents who commit different types of murder, as suggested by Lander and Schulman (5)? 2) Did the three groups have significantly different patterns of parental interaction and intimacy? Specifically, did the parricidal group show significantly different patterns of strong attachment to one parent, as hypothesized by Sadoff (2)? 3) Were different levels and patterns of disorganization and conflict present in the home environments of the three groups? Did they show histories of parental brutality and modeling of aggressive behavior, as reported for adult murderers by Satten and associates (9)? 4) Do significant differences in social and sexual outlets among the three groups support the idea of a lack of alternative means of tension discharge outside the family, suggested by Scherl and Mack (1) as a precipitating factor in parricide? 5) Do significant differences in follow-up data on the posttreatment adjustment of the three groups support the contention of Duncan and Duncan (4) that adolescents who commit or attempt parricide may adjust satisfactorily with no further lapses of impulse control but that other groups of adolescents who commit murder may repeat the offense?

PATIENTS

We reviewed the records of a regional forensic psychiatry hospital unit to select all adolescents admitted for observation during a 14-year period who were charged with murder by the region's juvenile court system. During the 14-year period 12 adolescents who were evaluated in this unit had been charged with parricide, out of a total group of 76 adolescents between the ages of 13 and 18 who were hospitalized for evaluation and observation on a charge of murder. The records of 2 of the adolescents charged with parricide were not available. The remaining 10 adolescents (9 boys and 1 girl) had been charged with 2 matricides, 6 patricides, and 2 matricide-patricides. Their records were matched as closely as possible for age, sex, IQ, socioeconomic level, and date of admission with those of adolescents in two control groups.

One control group consisted of 10 adolescents who had been charged with murdering a relative other than their parents or a person with whom they had a long-standing relationship. The other consisted of 10 adolescents who had been charged with murdering a person with whom they had no relationship before the murder. Psychiatric diagnoses were not available for most of the 30 adolescents; the hospital records listed the majority of them simply as "without psychosis." The average age of the 30 adolescents was 16 years, 6 months; the average number of years for which follow-up data were available was 4½.

METHOD

Follow-up data for each patient were obtained by reviewing hospital, prison, and outpatient clinic records, test reports, and social history data in addition to interviews with hospital and clinic staff and prison and parole officials. Using data from these sources, 31 social history, personality, and follow-up adjustment characteristics were determined by three researchers (B.F.C., B.C.B., and R.B.) to have been present or absent according to available data. We used presence-absence checklists to record these data. Additional data were obtained in some instances until 100% interrater agreement could be reached on all items.

The 19 variables dealing with personality, family, and environmental characteristics are listed in table 1.

Six variables were determined from the follow-up data available for the patients' behavior and adjustment after the murder. Five of these variables are listed in table 1; the sixth was a general adjustment level rating made by the agency or institution responsible for the patient.

Postrelease behavior data were gathered for paroled or released adolescents only. The 6 following variables were examined: 1) heterosexual contacts (typically dating or marriage), 2) adequate school or job adjustment (based on rating by parole officer), 3) social outlets (clubs, friends outside the family, hobbies), 4) re-arrest record or police charges, 5) incidents of self-destructive or aggressive behavior, and 6) acceptance by family (whether the patient returned to live with family or maintained close contact).

The number of patients who demonstrated each of the 31 research factors was counted for each of the three groups. Total scores for each factor of each

TABLE 1
Comparisons of 10 Adolescents Charged with Parricide (P), 10 Charged with Murdering Another Relative or a Close Acquaintance (R), and 10 Charged with Murdering a Stranger (S)

Variable	Comparisons, by Number of Adolescents Who Fit Variable								
	P	Versus	R	P	Versus	S	R	Versus	S
Personality, family, and environmental characteristics									
Absence of heterosexual relationships (dating)	5		1	5		0*	1		0
Poor impulse control	3		7	3		10**	7		10
Self-destructive behavior	1		2	1		2	2		2
Alcohol or drug abuse (including at time of murder)	1		0	1		5	0		5*
History of aggressive behavior	3		6	3		10**	6		10
Previous psychiatric treatment	3		4	3		0	4		0*
Previously jailed or placed in training school	1		5	1		9**	5		9
Previously placed in foster home	0		4*	0		3	4		3
Abused by parent	7		3	7		2	3		2
Overly attached to mother	6		1*	6		0*	1		0
Sexually overstimulated by parent	4		0*	4		0*	0		0
Absence of social (peer group) outlets	7		3	7		3	3		3
Home disorganization (marital conflict, neglect)	6		5	6		7	5		7
Maladjustment of parent (alcoholism, mental illness)	7		4	7		8	4		8
Father absent (physically or emotionally)	4		0*	4		1	0		1
Father physically abusive toward mother	5		0*	5		0*	0		0
Provocation for murder known	7		7	7		10	7		10
Evidence of planning of murder	0		1	0		7**	1		7*
Amnesia for murder act	5		0*	5		0*	0		0
Follow-up data									
Continued aggressive behavior	2		4	2		5	4		5
Suicide attempts or suicidal gestures	1		0	1		1	0		1
Social isolation	1		3	1		0	3		0
Bizarre or psychotic behavior	1		0	1		0	0		0
Active participation in rehabilitation	6		6	6		6	6		6

* $p<.05$
** $p<.01$.

group were compared by means of Fisher's exact test applied to the resulting contingency table for each factor.

RESULTS

The results of our analysis are shown in table 1. Adolescents who were charged with parricide showed the following significant differences from one or both of the two control groups: fewer typical adolescent sexual outlets and social relationships (manifested by differences in dating patterns); fewer indications of poor impulse control or aggressive behavior; more indications of chronic physical abuse by parents; more indications of overattachment to their mothers; more evidence of atypical sexual stimulation by parents; greater frequency of chronic abuse of a passive mother by the father; family patterns of absent fathers; and more instances of amnesia for the murder act.

The adolescents who were charged with murdering strangers were significantly more likely than the parricidal group to have a history of poor impulse control, aggressive behavior, and previous arrests and sentences to training schools. This group was significantly more likely than the group of adolescents charged with murdering a relative to have been identified by some agency as needing psychiatric treatment before the crime, to have shown instances of drug or alcohol abuse, and to have shown some evidence of planning the crime.

All three groups of homicidal adolescents showed a similarly low incidence of self-destructive behavior and almost no drug or alcohol intoxication at the time of the crime. A high level of family and home disorganization was present in all three groups, along with evidence of marked maladjustment and behavior disorders in the parents, although the types of parental disorders differed.

Follow-up information for the 30 adolescents covered at least 2 years and averaged 4½ years. These data show that the parricidal group had adjusted well outside prison with minimum psychiatric treatment and intervention. Only 1 patient in the parricidal group was incarcerated at the time of follow-up, and only 1 of the 20 other patients was on parole. Four of the patients in the parricidal group returned to their families, and all 8 of the patients in the parricidal group for whom follow-up data were available had been accepted by their families, maintaining frequent contact and, in some instances, living with the remaining parent.

As a group, the 20 adolescents in the control groups adjusted fairly well to the structured prison environment, often making "honor grade" status and partici-

pating voluntarily in work-study programs. Instances of aggressive behavior among these adolescents, however, were more common, even within the prison setting, than among the adolescents in the released parricidal group.

DISCUSSION

As a group, the 30 homicidal adolescents studied were born into homes that typically showed a high degree of family disorganization characterized by intense marital conflict, economic insecurity, parental brutality, and lack of social or community ties. One or both parents of 19 of the 30 adolescents showed evidence of extreme maladjustment, e.g., chronic alcoholism, repeated hospitalizations for psychosis, many incarcerations for criminal acts. These findings support some of the hypotheses (based on small numbers of cases) of authors such as Duncan and Duncan (4) and Lander and Schulman (5), who described destructive parent-child relationships and lack of nurturance and hypothesized that these may lead to acting out of intense hostility and homicidal behavior. The differences among the three groups of adolescents we studied may help to predict what type of adolescents murder their own parents rather than acting out their hostility against others.

Although each of our groups showed roughly equal numbers of parents with some evidence of extreme maladjustment, they showed different and characteristic patterns of parental difficulties. The fathers of 6 of the 10 adolescents charged with parricide were alcoholic. The fathers or mothers of 5 of the adolescents charged with murdering a relative had been diagnosed at one time as psychotic. A parent and/or other immediate family member of 8 of the adolescents charged with murdering a stranger had served a number of prison sentences for non-family-linked crimes, but in the other two groups overt hostility was more typically acted out by the parent against the immediate family, intensifying intrafamily conflict.

It seems to us that adolescents charged with murdering strangers came from homes in which antisocial behavior was a parental pattern that resulted in the incomplete socialization of the children, who, like the adolescents described by King (10), tended to view the victim as an object or obstacle interfering with some immediate need for gratification (6 of our 10 adolescents charged with murdering a stranger killed during robbery and 2 during rape). This group of patients began to act out primitive aggressive impulses early in life, and all 10 had a long history of impulse control problems characterized by aggressive, destructive behavior. Nine of the 10 had been placed in training schools or other institutions, which substantiates a long history of recidivist behavior. This also removed the adolescents from their parents as possible victims for long periods of time.

The adolescents who were charged with murdering a close acquaintance or a relative other than mother or father appeared to show less marked but similar histories of difficulty with impulse control, aggressive behavior, and incarceration. However, the motives and circumstances surrounding these murders tended to show some indications of deeper, continued interpersonal conflict and symbolic meaning rather than the simple, primitive acting out observed in the adolescents charged with murdering strangers. One adolescent in the group charged with murdering a relative murdered a woman who often acted as a mother surrogate. He killed her during a physical fight over money, but he referred later to his being angry about her expressions of favoritism toward her own children.

The 10 adolescents who were charged with parricide probably had fewer alternative modes of reaction to stress than the adolescents in the two control groups, as indicated by fewer social outlets, fewer sexual outlets, and fewer instances of aggressive behavior or lapses of impulse control. The mother-father-child relationships for the parricidal group showed two typical pattern differences from the control groups.

All 6 patients charged with murdering their fathers came from homes in which the father was a chronic alcoholic who was severely abusive to both the patient and his or her mother. The mother appeared to passively endure this abuse and maintained a close, positive, nurturing relationship with the patient. In the control groups, however, no close relationship with either parent seemed evident. The mother's relationship with the parricidal adolescent seemed to show little evidence of the intensely seductive or sexual mother-child interaction suggested by many studies.

The 2 patients charged with murdering their mothers showed patterns described by many previous studies (1–3), i.e., overly close, sexually provocative, seductive relationships with the mother and a distant father whose work required extended absences from the home. The father of 1 of the patients charged with murdering both parents was abusive to the mother, whose behavior was described by the patient as seductive toward him.

Sargent (11) hypothesized that the murderer who is a child may often be acting out covert commands and wishes from one parent or from others in the environment. Although it is not possible to prove that this kind of lethal situation exists in the home environment, it is interesting to note that the majority of the remaining parents of our parricidal adolescents remarried soon after the murder. In addition, follow-up of 8 of the adolescents charged with parricide indicated that 7 were maintaining close contact with their families (sometimes after very brief periods of hospitalization) and that 4 of these were living in the home of the remaining parent.

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Subtle Neuropsychiatric Sequelae of Carbon Monoxide Intoxication: Two Case Reports

BY JAMES W. JEFFERSON, M.D.

Carbon monoxide intoxication may result in subtle neuropsychiatric abnormalities that can be overlooked, misdiagnosed, or not fully appreciated. The author describes two patients who developed subtle but troublesome emotional and cognitive problems following carbon monoxide poisoning and stresses the value of sequential neuropsychological testing and judicious psychiatric counseling in such cases.

In 1940 Raskin and Mullaney (1) reviewed the literature on the effects of carbon monoxide (CO) asphyxia and noted a wide variety of neuropsychiatric abnormalities, including Korsakoff's syndrome, cortical blindness, a syndrome resembling multiple sclerosis, peripheral neuritis, dementia, psychosis, parkinsonian symptoms, Wernicke's aphasia, and manic-depressive psychosis. This point was further emphasized by Garland and Pearce (2), who observed that almost every known neurological syndrome had been reported as a complication of CO poisoning. Smith and Brandon (3) noted that such neuropsychiatric sequelae were not always dramatic and pointed out that "the temporal relationship of the sequelae to the CO poisoning was often appreciated by the patients and their informants but not by their physicians." They stressed that in order to design appropriate treatment the physician must be aware that a somatic disorder is responsible for these patients' altered psychosocial behavior.

The following two cases are reported as examples of the subtle neuropsychiatric impairment that can follow CO poisoning. They illustrate the value of psychiatric evaluation and sequential neuropsychological testing in defining the nature of the disability and in mapping a therapeutic course. They also show the importance of avoiding inappropriate therapeutic interventions that might be used if the therapist failed to consider the organic substrate of the illness.

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CASE REPORTS

Both patients were exposed accidently to high CO concentrations and were brought to University Hospital's emergency room early one morning in June 1973.

Case 1. Ms. A, a 23-year-old graduate student, awoke from sleep early that morning with a severe headache and shortly afterwards lost consciousness. When she reached the hospital she was awake, but was irritable, nauseated, complained of headache, and on one occasion vomited. Her face was flushed and she was lethargic and unable to answer questions appropriately. Arterial blood initially showed a CO saturation of 52%. Treatment with 100% oxygen, which was begun in the ambulance, was continued. In addition she received both methylprednisolone and mannitol to combat cerebral edema. Later that morning arterial blood CO saturation fell to 14% and by that afternoon returned to normal. A neurological evaluation was within normal limits and Ms. A was discharged two days later.

The following day, however, she was readmitted because

of generalized malaise, anxiety, and blurred vision. At that time it was felt that she was having a delayed psychological reaction to the fact that she almost died or had major central nervous system damage. By the next day she had improved enough to be discharged, although she showed some difficulty with recent memory. During follow-up Ms. A complained of apathy, fatigue, irritability, and unprovoked crying episodes. These symptoms prevented her from taking her scheduled doctoral examination that summer and, because of continued distress, she was referred for psychiatric evaluation and neuropsychological testing.

Case 2. Mr. B, a 35-year-old postdoctoral lecturer, was mildly confused on admission and unable to recall the events leading to his hospitalization. He complained of a moderate frontal headache. Physical examination was normal with the exception of red, mottled skin and left upper-extremity weakness. Arterial blood CO saturation was initially 51%. Treatment with 100% oxygen was given. By midmorning the CO saturation was 10% and later that day fell to 4%. In addition intravenous methylprednisolone was administered to reduce cerebral edema. Oxygen therapy was continued for an additional 24 hours, and Mr. B was discharged the next day. Beside the severe CO intoxication it was felt that while unconscious the patient had developed pressure-induced monoparesis of the left upper extremity.

Following discharge Mr. B complained of apathy, fatigue, irritability, and disturbed interpersonal relationships. Whereas he had been an accomplished and enthusiastic sailor, he now complained of relative indifference about the sport and noted an impaired ability to make the fine tactical decisions that had previously earned him considerable racing success. His difficulty with problem solving and lower resistance to the stresses of work hampered him professionally. Because of his continuing distress he was also referred for psychiatric evaluation and neuropsychological testing.

FOLLOW-UP

Neuropsychological Test Results (July 1973)

Ms. A's neuropsychological test results were generally considered to be within normal limits. She gave repetitive test evidence of very superior abilities in psychometrics, in abstraction-concept formation, and in a variety of other problem-solving measures sensitive to cerebral impairment. The results showed no evidence of motor deficits or sensory discrimination errors.

Ms. A did not perform quite as well on several measures of memory span and concentration as she did on other portions of the battery. This was thought significant only because of her very superior performance level on the overwhelming majority of tests presented her. In view of the overall excellence of her neuropsychological abilities and her Minnesota Multiphasic Personality Inventory (MMPI) profile, these marginally inadequate scores were felt to reflect interference effects from anxiety rather than a central nervous system deficit or dysfunction.

The MMPI profile was suggestive of moderate depression and anxiety. It was not possible to determine whether this was due to long-standing neurotic problems or was a situational reaction to her recent life-threatening experience. It was suggested that the referring physician and Ms. A further explore her attitudes and needs and that she be given massive (and entirely legitimate) reassurance that her cognitive functions were unimpaired and were clearly compatible with her educational program and goal.

Mr. B showed no impairment vis-à-vis test norms from nonneurological control subjects on any of the abstraction, memory, psychomotor-problem-solving, verbal-language, and other cognitive tests administered, and his motor proficiency and sensory discrimination abilities were within normal limits. It is possible that prior to the CO poisoning he might have displayed an even more superior performance on some of these tests, but there was no way to confirm this.

Mr. B showed evidence of being a mediocre speller and performed only within average range on the Wechsler Adult Intelligence Scale (WAIS) digit span recall test. However, it was difficult to interpret these isolated performance decrements as residuals of the CO poisoning because his performance on many tests considered sensitive to significant cerebral dysfunction was unimpaired.

His MMPI profile suggested considerable emotional and affective disturbance, characterized by depression, heightened awareness of and preoccupation with physical symptoms and body integrity, and a very high anxiety level. The MMPI profile showed that he was more than ordinarily introspective, worried, and, perhaps, obsessive regarding subjective "mental changes" associated with the CO poisoning. It was suggested that attention be focused on emphasizing his generally excellent test performance and encouraging his awareness that his residual symptoms (numbness of the left arm, difficulty in concentration, and disturbed short-term memory) were gradually improving.

Psychotherapy

Explorative and supportive psychotherapy was pursued with Ms. A and Mr. B, both individually and as a pair, over several months, with interview frequency decreasing in relation to clinical improvement. As therapy progressed it became increasingly apparent that the personality changes were clearly related to the poisoning. Consequently therapy was mainly supportive, reinforcing appropriate coping mechanisms while the patients gradually regained their premorbid level of functioning. During the following year periodic contacts with them confirmed that both had returned to their former high level of professional performance and had regained their zest for life.

A year after the poisoning neuropsychological testing was repeated to confirm the clinical impression of improvement, to probe for subtle persistent abnormalities, and to compare reevaluation results with the initial test results.

Neuropsychological Test Results (1974)

After one year Ms. A 1) had improved on the sustained auditory attention test, performing within the

unimpaired range (in 1973 she had received a mildly impaired score); 2) showed no improvement on the digit span subtest of the WAIS, with her performance continuing to fall within the average instead of the above-average or superior range, which might indicate a very mild relative impairment in immediate verbal memory span; 3) demonstrated a slightly slower finger-tapping rate than was noted in the previous examination; and 4) showed dynamometer grip strength and kinetic tremor test scores identical to or better than her initial scores and well within normal limits.

The MMPI profile showed improvement in Ms. A's emotional status, with less evidence of depression and anxiety. In those areas in which poorer performances were found on the 1974 than the 1973 test, the differences did not exceed the usual test-retest reliability of the measuring instruments.

After one year Mr. B 1) consistently showed significantly improved performances on all tests on which he initially received less than superior scores (including several measures of arithmetic computational ability and digit span recall); 2) continued to score somewhat below educational expectancy on the spelling subtest of the Wide Range Achievement measure (in the initial testing his grade score equivalent was 9.9 and in 1974 it was 10.2); and 3) had unimpaired performance on tests of sustained attention and concentration and rapid number-letter sequencing ability. A personality screening inventory showed changes compatible with his improved affective-emotional functioning.

In both cases periodic reevaluation was recommended because of the possibility of delayed adverse cerebral/cognitive reactions.

DISCUSSION

There have been numerous reports of the neuropathological changes following carbon monoxide intoxication, the most recent by Ginsberg and associates (4. 5). Since cerebral gray matter is more sensitive to hypoxia than white matter, the fact that leukoencephalopathic lesions are predominant suggests that factors other than hypoxia are critical. These may include metabolic acidosis, hypotension, cerebral edema, and peculiarities of blood vessel distribution in particular areas of the brain. Historically, lesions of the globus pallidus have been considered characteristic of CO poisoning, although such changes lack diagnostic specificity. Much of the neuropathological variation reported from study to study may be due to differences in severity of exposure rather than to more fundamental pathogenic differences. Certainly all central nervous system tissue must be considered vulnerable and even peripheral nerve abnormalities have been reported.

In the face of such an anatomical substrate it is not surprising that clinical abnormalities can be widely variable. Gross neuropsychological sequelae have been well recognized and thoroughly discussed (1, 3, 6, 7). Of particular importance is the observation that a "pseudorecovery" may occur, only to be followed days later by an acute relapse that may be severe enough to result in permanent disability or death (2, 7, 8). The etiology of this phenomenon is unclear.

More attention to long-term follow-up is needed to elucidate and define subtle neuropsychological abnormalities. In a preliminary report evaluating 147 survivors of CO poisoning, Smith and Brandon (6) noted that 50% of the victims had an abnormal mental status on regaining consciousness (irritable and restless, 21%; depression, 18%; anxiety, 4.3%; prolonged delirium, 20.3%). A three-year follow-up of 63 of these patients revealed that 33% had personality deterioration and 43% had persistent memory impairment. Smith and Brandon also noted a high correlation between personality deterioration and memory impairment and found that the level of consciousness at the time of hospital admission correlated significantly with development of these problems. They described a syndrome of "affective incontinence" that occurred in 8 of the 63 patients, a personality change that took the form of irritability, aggression, and violence in association with impaired cognition.

Veil and associates (7) evaluated sequelae of CO poisoning in 108 victims one year after intoxication. Their tests were designed to examine psychological, socioprofessional, psychopathological, and physiopathological factors. The patients were compared with a control group of patients who had experienced a loss of consciousness not caused by CO poisoning. They concluded that all of the CO victims had some symptoms that could be identified as sequelae to the poisoning. Since abnormalities were diverse in both nature and severity, the existence of a common syndrome could not be confirmed. They felt that the consequences of such a disability might vary considerably, depending on the person's basic personality and his or her social and professional role. Among abnormalities noted were difficulties with structural-spatial relationships, shortened attention span, sleep disturbances, fatigue, memory (especially recent) deficits, and a global impairment of physical aptitude. These abnormalities were frequently of such a subtle nature that they were detectable only by extensive and sensitive evaluation techniques.

CONCLUSIONS

The studies described above illustrate that an appreciation of the protean neuropsychiatric manifestations of CO poisoning is essential if appropriate therapy is to continue beyond the acute phase of intoxication. Subtle alterations in affective and cognitive functioning are frequent occurrences and are causally related to the effects of carbon monoxide on cerebral functioning.

Although both patients described what they considered to be unequivocal personality changes following the poisoning, there was an initial tendency for their treating physicians (internists, psychiatrist, and testing psychologist) to ascribe these symptoms to psychoneurotic causes. An in-depth review of pertinent literature and a series of psychiatric interviews allowed a clear delineation of the temporal relationship between the poisoning and the personality changes. Subsequent therapy was appropriately tailored to the situation and their symptoms gradually abated. Neuropsychological testing a year later confirmed this observation.

The value of sequential testing is clear, since the initial test battery represented only one point in time and could not define the contribution of the morbid event to the abnormalities noted. In addition, because both patients had superior intellectual capabilities, considerable impairment occurred without the test results falling below the limits of normality. Only when there was clear improvement on the repeat testing did the degree of initial impairment become evident.

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The Psychiatrist in Primary Medical Care Training: A Solution to the Mind-Body Dichotomy?

BY ALAN M. LAZERSON, M.D.

The author calls attention to developing changes in medical training that may provide an appropriate setting for overcoming the dichotomous view of mind and body, of psychological medicine and "scientific medicine." Primary care training programs that include liaison psychiatry may be the vehicle for solving this persistent problem.

IN 1940, Deutsch and associates (1) wrote:

> The intimate relationship between psychological factors and bodily function has always been recognized in medicine, but the task of conveying the importance of this relationship to . . . students has depended more on the individual teacher's interest than on any considered program. To facilitate a study of the problem and to formulate a teaching program, a collaboration between psychiatrists and internists was considered essential. This hospital, because of its compactness, excellent clinical material, and general administrative and clinical organization, offered an unusual opportunity for this type of endeavor. The teaching was adapted primarily to a somewhat changing group of fourth year medical students, the resident staff, and many of the junior visiting physicians. (p. 1)

Almost 25 years later Reichard (2), at the same hospital, wrote,

> The medical chart of today offers convincing evidence that the tradition of medicine is strongly antagonistic to treating psychological data in the systematic, scientific manner that is accorded to physiological data. The ideal of contemporary medicine should be to eliminate this illogical distinction. The rational, critical method used by medical doctors to deal with physiological data should be extended to include psychological data. At the present moment, unfortunately, this goal is completely out of sight.

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> Medical doctors lack a conceptual system that would enable them to observe and appreciate psychological events. In most cases they lack the skill to set up a therapeutic alliance which would permit them to obtain information from their patients and then to use that information to influence their patients in a psychologically effective manner. And last, the tradition of medicine operates to preserve an arbitrary and obstructive distinction between psychological and physiological events. (p. 202)

Unfortunately, this experience at an outstanding teaching hospital with a history of excellent leadership and faculty in both psychiatry and medicine is typical, as are the aspirations and the disappointment expressed in the two quotes. The importance of studying and understanding the doctor-patient relationship and the psychological reactions to organic illness, the fallacy of psychiatric diagnosis by exclusion, and the problems in history taking and patient management (1) are all well known now by psychiatrists who teach medical students, house officers, or practicing physicians. Yet, in spite of long-term and widespread teaching of psychological medicine at all these levels, little progress seems to have been made in these areas in the population of practitioners at large (3, 4). Although certain psychological factors that interfere with such learning have long been appreciated, the extrinsic factors, "the tradition" referred to by Reichard, have proven to be an impasse.

ATTEMPTS TO OVERCOME THE MIND-BODY DICHOTOMY

The purpose of this paper is to call attention to developing changes in undergraduate and graduate medical training that may, at last, provide an appropriate setting for overcoming the dichotomous view of mind and body, of "functional" and "organic" illnesses. Psychiatrists who teach medical students, house staff, and other physicians would do well to be alert to these changes.

In 1966 a major public review of our medical care system, the Report of the Citizens Commission on Graduate Medical Education (referred to as the Millis Commission Report) (5), brought the term "primary physician" to public attention and identified the growing shortage of primary care physicians as the leading problem confronting our medical care system. The commission noted that "the primary content of graduate education for comprehensive care should consist of medicine, psychiatry, pediatrics, medical gynecology, and preventive medicine," "simple rotation will not be sufficient," and "the teaching should stress continuing and comprehensive patient responsibility rather than the episodic handling of acute conditions in the several areas." Since then, an increasing number of publications has called for a national commitment to the education of personal, family, or primary physicians at all levels of training. These include a later report by Millis (6), the Carnegie Commission report (7), and articles by Willard (8), Haggerty (9), and McGraw (10).

The historical background and problems of the developments in primary care have been thoroughly reviewed by Alpert and Charney (11), who are pediatricians. These authors also described past and current undergraduate and graduate medical education programs as well as the elements of a successful primary care program. A psychiatrist reading this monograph will agree with many of their observations and conclusions.

With this demand for primary care providers increasingly articulated by the public and likely to be expressed in legislative mandate, certain forces are emerging that favor the integration of "scientific medicine" and "psychological medicine." These forces include a definition of primary care that focuses on the patient more than on the illness, the interface between patient and doctor, acceptance of the psychological aspect of care along with the physical and social, and recognition of longitudinal responsibility for the patient (11). We may note that the focus on the interface between patient and doctor is identical with that on the patient-physician relationship described by Deutsch and associates (1).

Training programs designed to meet some or all of these goals are attempting to grapple with specialty separatism and the long-standing constraints in the teaching hospital and the medical school (12, 13). The following facilities and capabilities would help to provide a supportive environment for the mastery of psychological medicine: an ambulatory in addition to a crisis-oriented inpatient setting, training programs that last for several years and are centered in hospital outpatient departments and neighborhood health centers, selection at all levels of trainees who have an interest in primary care, and a multidisciplinary faculty, including psychiatrists.

My experience in this field, in addition to more than 10 years of teaching medical students and both psychiatric and nonpsychiatric residents, has been as a teacher for 2 years in an innovative primary care residency training program in pediatrics and medicine at Boston City Hospital. Under the joint direction of Joel J. Alpert, M.D., Chairman of the Department of Pediatrics at Boston University School of Medicine and Chief of Pediatrics at Boston City Hospital, and Alan S. Cohen, M.D., Chief of the Department of Medicine at Boston City Hospital, this program has been developed as a 3-year track for internists and pediatricians chosen from their overall internship and residency training programs at the hospital. The ambulatory component is housed in a Primary Care Center in the medical outpatient department, with training at two neighborhood health centers as well. The program (which will be more fully described in subsequent works) has a faculty that includes internists, pediatricians, psychiatrists, nurse practitioners, sociologists, social workers, and family health workers. The trainees are in the clinic 1–3 times a week and follow most of their

patients throughout their training period. A comprehensive built-in evaluation of the program, trainees, patients, charts, and faculty has been developed to assess achievement of the program's aims. Methods for teaching psychological medicine include observation and supervision of work with individual patients, case conferences, and seminars similar to those outlined by Deutsch and associates (1), Balint (14), Reichard (2), and others.

What is new for liaison psychiatrists is the combination of the new emphasis, the recognition of past and current problems confronting medical education, the developing institutional support, and the longitudinal training aspect, which includes the involvement of the psychiatrist. To quote Alpert and Charney (11),

> the primary care doctor spends most of his time thinking about the patient and the impact of various forces on his health or illness over a period of time. The secondary or tertiary level doctor spends most of his time thinking about a disease state or a technical skill and how various patients fit into or alter that field of interest over a period of time. For one, the illness is the episode; for the other, the patient is the episode. (p. 3)

Previous programs for both medical school and house staff training in general have emphasized block, short-term experiences at the expense of longitudinal ones. The longitudinal aspect in such a program as the one described above allows for the overwhelming experience of the internship and the intern's need to master "desperate medicine" (15), while providing an early opportunity for "imprinting" or identification as a future primary care physician. As the intern rises from the nadir of his receptivity to psychological learning to a less anxiety-filled residency, the psychiatrist, along with the other primary care faculty members, is still there to help him master his broader task. To quote Alpert and Charney (11) again, "The student is most likely to learn how to elicit, to appreciate, and to utilize social and psychological data when the curriculum permits long-term contact and responsibility for some patients, and when the setting prompts him to consider such problems as pertinent" (p. 60).

The mutual student and faculty selection process at medical school and internship levels may result in a greater proportion of trainees who are open to the idea of a continuum in physiological and psychological medicine rather than a dichotomy. The process by which program and trainee select each other can include a mutual selection interview such as that which improved the success of the teaching of the Balint group (3).

Since 1966, when the Millis Commission Report called for a national commitment to produce primary care physicians who would represent for most patients the common point of entry into a reorganized, revitalized, and rational system of health care delivery, certain traditions in medicine have come under increasing scrutiny and pressure to change. Primary care medicine may be a major vehicle for overcoming the traditions that maintain the mind-body dichotomy. A careful evaluation of this aspect in such training programs will help us to answer the question posed in the title of this paper.

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Student Mental Health Services and Departments of Psychiatry

BY CLIFFORD B. REIFLER, M.D., M.P.H., AND RAYMOND BABINEAU, M.D.

The authors suggest that the potential usefulness of a college mental health service as a site for teaching, training, and research has been underestimated by departments of psychiatry. College health services can provide an opportunity for both trainees and investigators to deal with concepts of psychotherapeutic intervention, a developmental perspective, and a community mental health orientation.

A RECENTLY PUBLISHED STUDY of psychiatric residency programs reviewed a broad range of clinical interests and training loci in current residency programs (1). We note, however, that college mental health services were not mentioned in the survey. We believe this would be a useful time to reemphasize the potential merits of a close affiliation between a psychiatry department's residency training program and a college mental health service.

Relationships between departments of psychiatry and student health services have shown considerable diversity. On one hand there are educational institutions with well-developed and established programs in both psychiatric residency training and mental health services for students in which the two facilities seem to operate on entirely separate tracks in splendid isolation from the interests and needs of each other. For many years the University of Michigan was one of the better examples of schools with this arrangement. Just across Lake Michigan, on the other hand, is an outstanding example of a quite different model. At the University of Wisconsin the entire responsibility for providing student psychiatric services is taken directly and apparently exclusively by the department of psychiatry without any significant association with the student health service. One of us (C.B.R.) has been fortunate in having been associated with institutions in which neither extreme exists. Both the University of Rochester and the University of North Carolina follow a model of joint appointments, shared responsibility, and common endeavor.

Institutions in which the possibility of joint contributions exists have developed overlapping interests and activities to a varying extent. Unfortunately, the possibility of such collaboration is not always present. Although there are more than 2,000 institutions of postsecondary education in the United States, there are only 114 medical schools, 99 of which have psychiatric residency programs affiliated with them. Of the medical schools with psychiatric programs, almost half either have no university affiliation (e.g., Rush Medical College in Chicago) or are located on a medical center campus separated from the parent university. This distance may be no more than a few miles (e.g., New York University in New York City), or the two campuses may be separated by an entire state (e.g., the University of Oregon, which has its medical school in Portland and the main campus in Eugene). These geographic and organizational relationships influence many aspects of the medical school's functioning, including health care.

Even when medical centers are independent of or geographically separated from a university, they encompass broad teaching programs in allied health fields and therefore have a responsibility for the health needs of substantial numbers of students. The degree of acceptance of this responsibility for the health needs of their students varies considerably among medical centers, in terms of providing for general health care and mental health needs. There are no extensive data on how well this responsibility is being met, but a field study sponsored by the Joint Information Service of the American Psychiatric Association and the National Association for Mental Health gave an in-depth view of 7 different models of mental health delivery systems to students (2).

As we view how medical centers handle their responsibility for the health care needs of a variety of students (including medical and nursing students, graduate students in biomedical sciences, and students in X-ray or laboratory technology), we have the impression that it sometimes happens that these students suffer from benign neglect. It is assumed that because of their proximity to a medical center, they will find access to health care. The degree to which this neglect is a problem is undocumented.

There have been no national surveys of mental health resources in colleges and universities since that of Gundle and Kraft in 1953 (3), which did not specifically deal with medical centers. They surveyed 1,000

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colleges and universities and found well-developed student mental health clinics in 101. At that time only 8 facilities reported involvement with psychiatric residency training programs. In the more than two decades since that survey, both residency training programs and student mental health programs have proliferated, and there has been increasing recognition of areas of common interest and mutual involvement.

EDUCATIONAL CONSIDERATIONS

An important educational consideration is that health professionals in training are influenced by the model of care they receive. With specific reference to mental health services, the attitudes of future physicians and other health care professionals are strongly influenced by the quality of the help received or not received and the role models they see in a health service. For example, it is not unusual for a college student or a medical or nursing student who has been significantly helped by a psychotherapeutic intervention to begin to think seriously about a career in a mental health field or to view the field in a more positive way.

In psychiatry departments in which the opportunity exists, the student health service has long been recognized by psychiatric residents as a popular rotation that is sought and anticipated, whether elective or required. This has also been true of graduate students in psychology.

With respect to needs for psychiatric clinical education and training the reasons for the student mental health service's popularity are clear. Patients with psychiatric problems who come to a student health service are usually seen within a few days after their request for an appointment. Their distress is fresh, their problems are often of recent development, and there has not been time for affect to be discharged, either by multiple screening interviews or by accommodation to an elevated level of anxiety. The patient's contact with the center is often the first such experience he or she has had; the illness can therefore be seen in the early phases of development.

The student patients are generally young, intelligent, and articulate. They are often extremely verbal and able to express their thoughts and feelings in a manner the resident can understand. Many of the student patients are well motivated and responsive to psychotherapeutic intervention. Most of them get better, and they often show a positive response in a relatively short period of time.

It is an important experience for the beginning therapist to see that psychotherapy can bring about change. One of the frequently mentioned difficulties of current residency programs is that of identity diffusion and therapeutic nihilism (4, 5). Successful therapeutic experiences with student patients are useful for validating the psychotherapeutic process. They also serve to provide the beginning therapist positive feedback regarding the utility of his or her own activity.

Another important characteristic of the college mental health service is that it provides the resident an opportunity for exposure to an increased range of psychopathology, primarily in the direction of normal behavior. The experience also provides the resident a singular opportunity to make use of a developmental perspective in understanding human behavior, particularly the tasks of late adolescence and early youth.

An example of the health service's role in focusing on a developmental perspective was described at one of our weekly mental health staff training conferences. Five third-year residents were reviewing their experience working during the past year in the student health service. One resident commented that before this experience the pedagogic injunction to "view your patients in a developmental perspective" had often been a meaningless cliché for him. Working with students, however, had taught him the meaning and utility of this concept. He had learned that he could not have a good clinical understanding of a freshman student unless he knew how the student was faring with the developmental tasks of separation, adjustment to a new environment, and adaptation to social and academic pressures. Similarly, in dealing with college seniors he had learned to be clinically inquisitive about such issues as readiness for postgraduation life and comparison with peers concerning levels of academic, social, and sexual achievement.

None of the preceding is meant to imply that severely disturbed people are not seen at a student mental health service; the incidence of acute psychotic disturbances is fairly uniform: 2 per 1,000 university students per year (6). However, there are few other clinical facilities that offer an opportunity for the same degree of careful study and observation of persons functioning at the normal to neurotic end of the disability continuum.

There are also few other populations in which the relationship between socioenvironmental stress and the development of psychiatric symptoms is as clearly manifested and as potentially amenable to planned interventions. The responses of students to such factors as changes in their living conditions or in the curricular or social structure can often be readily identified clinically and are available for systematic study in the college community (7).

THE UNIVERSITY COMMUNITY

We have thus far discussed the collaboration of departments of psychiatry and student mental health services in the care of those who are identified as patients. This is the central core of the activity of a college health service and is an important clinical function of a department of psychiatry.

However, educational and service needs extend beyond the identified patient into the community, in this case, the well-defined university community. As articulated previously (8, 9), the college-community

interventions of a college health service can be used as both a model and a laboratory for studying and evaluating many aspects of community psychiatry.

Using this opportunity most effectively is usually difficult, even for a well-staffed college health service. The varied professional skills necessary to do so are often beyond the scope of a self-contained health service and are more likely to be found in a health service with a close affiliation with a department of psychiatry. Optimally, mental health professionals in a health service should have academic appointments with teaching and research responsibilities. Unfortunately, research and scholarly inquiry have not frequently been the hallmarks of college mental health services. Encouragement and collaboration in these endeavors is an area in which a department of psychiatry can make a profound contribution to both psychiatry and college mental health. In doing so, the department offers its residents and other mental health trainees a useful training locus where concepts of psychotherapeutic intervention, a developmental perspective, and a community mental health orientation can become quite real and well integrated.

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Early Sex Education in Relationship to Later Coital and Reproductive Behavior: Evidence from Jamaican Women

BY EUGENE B. BRODY, M.D., FRANK OTTEY, M.D., AND JANET LAGRANADE, M.D.

In a group of 150 working-class Jamaican women, lack of information from their mothers about sex coupled with chronic resentment was associated with having had more sexual partners, impregnators, and children. In contrast to age at first coitus, age at first pregnancy did not seem related to the early availability of information about sex, and it was less significantly correlated with overall education.

ALTHOUGH THE IMPACT of early experience on later sexual and reproductive behavior is a matter of great interest to psychiatrists, most studies in the field are essentially anecdotal and limited to a small number of women who have presented themselves as patients with emotional difficulties. However, the occurrence of pregnancy in adolescents and of unwanted pregnancy in general is attracting systematic research interest.

Some studies of pregnant adolescents in the United States have elicited histories of inadequate sexual education and reproductive-contraceptive information and ambivalent and conflictful mother-daughter relationships (1–4), as well as insufficient parental supervision in general, with a relative lack of reinforcement of conventional ethical codes (5). Promiscuity and failure

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to use contraception in a purposeful way seem to characterize adolescent girls whose parents were hostile and distant from each other, who felt alienated from their mothers, and were, in contrast, intimate with their fathers (6, 7). The low self-esteem and unresolved dependency needs in girls with such backgrounds are interpreted as reducing the likelihood of their assuming responsibility for their own sexual and contraceptive behavior; these factors also raise the possibility that some of their sexual behavior leading to pregnancy is symptomatic (8). These findings are congruent with those indicating that women who perceive themselves as high on a cluster of competency traits and who have relatively high self-esteem tend to have fewer children than those perceiving themselves as low in this cluster (9, 10).

Several other studies have indicated that failure to use contraceptives, especially among women seeking abortion, is correlated with particular personality traits. They did not, however, report data on the early sex education of the subjects. Kane and associates (11), in fact, have presented information from a group of white women arguing against the idea that lack of information about contraceptives contributes to the occurrence of unwanted pregnancy. In another study (12) they found that knowledge of contraceptive techniques was well diffused in a mixed population of black and white women seeking abortions in a small town in the rural South.

The lack of systematic data on this score, as well as clinical evidence that parents' willingness to offer sexual information to their children is an indicator of the nature of the developmental setting, directed our attention to the problem. The present report is based on data gathered during the course of a larger investigation of psychocultural influences on contraceptive behavior in Jamaica (13). This is a country in which, traditionally, early demonstrations of fertility are highly valued, at the same time that a pattern of "strictness" and failure of mothers to give formal sexual instruction to their daughters has been noted for a generation as a problem related to family life (13–16). This failure of intergenerational communication exists in a matrifocal familial setting (17) in which the centrality of the mother-daughter relationship influences the attitudes of both to men, sex, and reproduction; it creates a situation in which a woman sometimes is more responsive to her mother's needs and wishes than to those of her mate (13). With these considerations in mind, this report presents data, obtained through life-history interviews, relating early sex education from parents (or surrogates) to later sexual and reproductive performance in Jamaican women.

THE STUDY POPULATION

We studied 150 women residing in Kingston, Jamaica. The sample included 100 female clients (all contraceptive users including 12 who were just beginning to use them) at the Jamaica Family Planning Association clinic in the inner city and 50 female patients, nonusers of contraceptives, at a comprehensive health center serving a comparable population. Each woman was interviewed for approximately 2½ hours in the setting where she had come for help. Subjects were selected at random by the clinic or center nurse as the interviewers were available. These last, Jamaican psychiatrists trained by the senior author, used an associative clinical interview style, following leads as the patients offered them. Data were recorded on forms outlining detailed life history including sexual, contraceptive, and reproductive data. If areas were not covered or questions about them were inconsistently answered, the interviewers refocused on the topic in question until they were satisfied that adequate information had been obtained.

Selected as part of a study of fertility-related behavior, the subjects provided a range from early to late contraceptive use to nonuse. They ranged in age from 16 to 47 with a median of 25.5 years; 83.4% were 31 years of age or less. They had had from 0 (12%) to 10 pregnancies each, with an almost even division between 0–2 and 3–10. Forty percent had been pregnant by 2 or more men.

The status of their relationships with their current male partners approximated that of the population at large: 84% had never been legally married; 43.3% were visited regularly by a man for the purpose of sex, companionship, or child rearing; and 48.7% cohabited with their current mate, including 34% in a common-law relationship and 14.7% who were legally married. In almost one-half of the cases the current relationship had not continued for more than 3 years.

More than three-fourths of the women had never received any information about sexual relations from their parents or surrogates, and almost one-half had had no adequate instruction about sex or reproduction from anyone prior to menarche. Approximately one-third had not received such instruction prior to the birth of their first child or by the time of the interview. Over one-half expressed resentment at their mothers for their failure in this respect, and for another 14% the resentment was easily inferred. More than two-thirds also reported experiencing strong negative feelings (shame, disgust, and fear) at the onset of menstruation. Only 8.7% had clearly positive feelings about becoming a woman.

Almost one-half (46.7%) had had intercourse by the age of 16, and two-thirds by 17. Only 5.7% had used contraception on this occasion, and for 10% first intercourse resulted in pregnancy.

Over three-fourths of the women had not progressed past primary school, and 21.3% were illiterate. All but a negligible number had completed their schooling. Of the 66.3% who were employed at least part-time, approximately one-half were in manual jobs (predominantly domestic, custodial, and factory work) and one-half in nonmanual jobs (predominantly low-level clerical work).

RESULTS

The analyses are presented in the form of gammas, coefficients of correlation useful for dealing with phenomena that are not always ranged along a scale in monotonic units and that do not always occur in the form of a normal distribution curve. Gamma measures the predictability of order on one variable from order on another (18). Correlations of .30 or above are regarded as having practical significance. Those of .30 to .20 show valid trends, with decreasing significance. Comparisons with Kendell's rank correlation coefficient suggest that values of .25 to .40 range from probabilities of occurrence of .05 to .001.

Table 1 shows that women who received sexual information from their mothers were older at first coitus (although not at first pregnancy) and had given birth to fewer children by the time of their clinic visit than those who had not had such sexual instruction. Early sex education, regardless of source, was also associated with lower reproductive performance and fewer sexual relationships, although not with age at first coitus (see table 2). Conversely, more impregnators and more babies (although not age at first coitus or at first pregnancy) were correlated with resentment at lack of information from or communication with the mother about sex, sufficient to permit its expression to interviewers (see table 1).

Table 3 shows a number of positive correlations, of varying significance, between a complex of factors associated with socioeconomic status and modernity and a tendency to be older both at first coitus and at first pregnancy. The correlation between education and age at first pregnancy was much weaker than that between education and age at first coitus.

Being older at first coitus and at first pregnancy appears to have predictive implications. Both factors were correlated with consistent current use of contraceptives and discussion about contraception with current mate, i.e., indicators of conscious communication and planning about personal fertility control.

The role of schooling in this predominantly undereducated population is further explicated in table 2. Greater educational achievement was positively related both to having received sexual information from the mother and to having such knowledge at an early age. As expected, it was correlated with higher age at first coitus, planned and consistent current use of contraceptives, and discussing contraception with a current mate of higher occupational status. While women of lower educational achievement tend to have had more pregnancies by several men and more births, in our sample educational level was only weakly correlated with age at first pregnancy.

DISCUSSION

This group of Jamaican women from lower social classes was characterized by little early sex instruction, poor communication with parents, and an unstable household situation with legal marriage as the exception. Within this group lack of information from the mother about sex coupled with chronic reactive resentment was associated with having had more sexual partners, more impregnators, and more children. Chronic and conscious resentment may follow a complex of childhood factors associated with lack of open communication with parents, or it may be secondary to the unhappy life experience implied by a series of impermanent sexual relationships resulting in cumulative responsibility for child care. Higher educational achievement and having received sex information from the mother were associated with later age at first intercourse, fewer sexual partners and impregnators, and fewer children. We suggest that women with this background were more autonomous, independent, and inclined to self-regulation than most of their island confreres, who left their reproductive functions to chance or nature or, following traditional norms, subscribed to the value of large families.

In contrast to age at initial coitus, age at first preg-

TABLE 1
Correlation Between Sexual Instruction and the Coital-Reproductive Histories of 150 Jamaican Women

History	Correlational Index (gamma)		
	Resents Lack of Information from and Communication with Mother about Sex	Received Information about Sex from Mother	Received Early Sex Instruction Regardless of Source
More pregnancies (versus median or fewer) per age group	.33	−.31	−.09
Number of impregnators in women having 2 or more pregnancies*	.31	−.38	−.22
Age at first coitus	−.15	.26	.09
Age at first pregnancy	−.14	.07	−.04

* N=101.

TABLE 2
Correlation Between Sexual-Reproductive Factors and Education in 150 Jamaican Women

Sexual-Reproductive Factor	Correlational Index (gamma) Education
Planned use of contraceptives (space/delay versus completed family)	.60
More pregnancies (versus median or fewer) per age group	−.43
Number of impregnators in women having 2 or more pregnancies*	−.45
Sex information from mother	.37
Early sex instruction	.37
Mate's occupational status	.35
Age at first coitus	.34
Discussed contraception with mate	.33
Consistent use of contraceptives	.29
Age at first pregnancy	.20

* N=101.

TABLE 3
Factors Associated with Age at First Coitus and First Pregnancy in 150 Jamaican Women

Factor	Correlational Index (gamma) Age at First Coitus	Age at First Pregnancy
Age at first coitus	1.00	.67
More pregnancies (versus median or fewer) per age group	−.41	−.57
Nontraditional-modern role for grandmother	.37	.32
Education	.34	.20
Used contraception to delay first pregnancy or to space later pregnancies	.31	.38
Discussed contraception with mate	.27	.33
Cohabits rather than visits with mate	.27	.05
Consistent use of contraceptives	.25	.37
Uses reliable (oral) method of contraception	.22	.22
Occupational status of mate	.20	.18
Number of impregnators in women having 2 or more pregnancies*	−.20	−.35
Receives significant financial support from mate	−.01	.07

* N=101.

nancy did not seem to be related to early sexual information, and it was less significantly correlated with overall education. Other evidence (13) suggests that this may be due in part to a culturally reinforced wish across social class boundaries for an early demonstration of one's fertility; it may also reflect a relatively low frequency of intercourse at early ages.

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Assessment of Sociolegal Judgment of Offenders

BY MARIE S. CERINO, A.C.S.W., AND ANTONIO J. DY, M.D.

While working with young male offenders the authors developed a scale to assess sociolegal judgment, i.e., the ability to evaluate the possible social and legal consequences of various choices of action in a given situation. They found that some inmates had committed crimes because of poor sociolegal judgment, whereas others understood the consequences of their actions but chose to act illegally despite this knowledge.

SOON AFTER WE were given the responsibility in August 1974 of doing diagnostic evaluations on sentenced inmates at a correctional institution for young men (ages 16 to 21) we learned that the traditional mental status examination used by psychiatrists generally failed to evaluate adequately an area that we called "sociolegal judgment." Sociolegal judgment may be defined as the ability to assess the possible social and legal consequences of one's choice of action in a given situation. We assumed that a person who had sound sociolegal judgment and acted in accordance with it would be less likely to get in trouble with the law than someone with poor sociolegal judgment. A notable exception, the person who understands the consequences of different actions and can give an excellent or impeccable verbal description of them, but who still chooses to act injudiciously, will be discussed later.

In the course of sharpening our evaluation process we developed a tool to help measure more objectively various factors believed to contribute to the path to incarceration. This tool, the Multi-Area Review, Interview, and Examination Evaluation (MARIEE) profile (1), provided a graphic representation of inmate strengths and weaknesses, greatly sharpened our evaluations, and countered the "charm" of some of our more manipulative clients.

THE MARIEE PROFILE

The MARIEE profile consists of questions covering the preincarceration, incarceration, and projected postrelease phases of the inmate's history. Areas initially included in the preincarceration part were family stability, parenting, history of socialization with peers, school adjustment, attainment in school, impulse control, violence, drug and alcohol use, juvenile record, adult criminal history, psychiatric history, and employment history. The incarceration section assessed family stability and support, current educational involvement, vocational training, adjustment in the institution, and psychiatric functioning. Items in the projected postrelease section included marketable skills, residence, and supportive people.

Although the preincarceration and incarceration profiles provided fairly clear pictures of the many possible reasons why most inmates had gotten into trouble and the changes that had occurred in them since incarceration, they failed to clarify why some inmates with high scores in most areas had become involved in criminal activity. As we interviewed more of these atypical inmates we began to sense that a crucial dimension was missing from the profile. When the sociolegal judgment scale was introduced the puzzling profiles became more comprehensible. This scale was placed between the preincarceration and incarceration phases because it deals with both present judgment and previous behavior.

THE SOCIOLEGAL JUDGMENT SCALE

The test to measure sociolegal judgment was devised after we had considerable experience with a number of inmates who seemed to have incurred incarceration more because of lack of judgment in handling a situation than because they had intended to commit a crime. The scale's questions may be grouped into 4 categories: offenses or situations involving 1) acquisition, 2) circumstantial or peer involvement, 3) violence, and 4) sexual involvement. The questions themselves are given in appendix 1.

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The conclusions and opinions expressed herein are those of the authors and do not necessarily reflect the views of the State of Connecticut Department of Correction.

The inmate was asked what he would do in each given situation and the reasoning behind his choice of action. It was sometimes helpful to further elaborate the hypothetical situation to get a clearer picture of the subject's apperception, evaluation, decision, and reaction. Scoring was done on a 7-point scale (+3 to −3) similar to the scale used for the other variables on the MARIEE profile (see appendix 1).

DISCUSSION

The inmate who gives a perfect verbal response on the sociolegal judgment scale but has committed a series of offenses obviously presents a special problem. We generally recognize, however, that he may be a bright "sociopath" who knows what is right and wrong but chooses, in spite of this knowledge, to advance himself by illegal means and is then caught.

Warren and associates (2) described a classification of interpersonal maturity levels for juveniles that takes into account some of the same factors as our sociolegal judgment scale. For example, a person at one of the lowest maturity levels (I_2) in that system "is primarily involved with demands that the world take care of him" and "is not interested in things outside himself except as a source of supply." A person who is at the I_2 level on Warren and associates' scale is likely to score −3 on our scale.

From our contacts with incarcerated offenders, we have noted that there is a small group whose main problem is a genuine difficulty in sizing up a situation and responding to it appropriately. These inmates seem to suffer from poor judgment, which might be repaired with sociolegal counseling. Through use of the sociolegal judgment assessment scale, we have become more able to recommend therapeutic approaches for our inmates, e.g., suggesting individual counseling focusing on a weak point in exercising judgment, or referring the inmate to a program designed along the lines of the moral development theory of Kohlberg and associates, the Just Community Program at the Connecticut Correctional Institution-Niantic (3). This program reported a prison return rate of only 16% for program participants (3, p. 4). However, only female inmates were program participants at the time of the study. If this rate of return is replicable when the program includes men, it would certainly be an improvement over the general return rate of approximately 33% at the facility for male youth (4).

In addition to helping us make referrals to the Just Community Program, the sociolegal judgment scale also guided us in making referrals to the Oncit Program (an intensive treatment unit at the Connecticut Correctional Institution-Cheshire that is run as a therapeutic community) and the Thresholds Program (a decision-making course run by volunteers at the Connecticut Correctional Institution-Cheshire).

One of us (A.J.D.) has also begun to use this assessment on adult male offenders. We hope that additional applications by ourselves and others will contribute to the refinement of this assessment tool.

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APPENDIX 1

The Sociolegal Judgment Scale

QUESTIONS

Acquisition

1. If you saw a friend taking the tires off a car and he asked you to stand on the corner and alert him if the police were coming, what would you do?
2. If you found an envelope addressed and stamped but open, and inside found a letter, a photograph, a check, and some cash, what would you do?
3. If someone wanted to sell you a color TV for a lot less than you knew it was worth, what would you do?

Circumstantial Involvement

1. If a friend offered to pay you to keep a box for him because he was going away for a few weeks, would you do it?
2. If you were at a party while on parole or after discharge and people were drinking liquor and smoking pot, what would you do?

Violence

1. If you came upon a friend in the street and he was having a fight, what would you do? If it were two against one?
2. If you were at a party, or on the street, and people started throwing banana peels at you, what would you do? If you were hit with a bottle? If they were throwing garbage cans?
3. If someone were breaking into your home what would you do? If a phone were available? If a gun were available?

Sexual Involvement

1. If a young girl (of uncertain age, maybe about 15 years old) became very friendly with you at a party and asked you to go off with her, would you do so?
2. If, while you were delivering something to homes, a woman asked you in for coffee, would you stay? If she were in a negligee?

SCORING

+3: congruence of positive verbal sociolegal judgment with behavior; value system internalized.

+2: general but not consistent congruence of positive verbal sociolegal judgment with behavior; value system externalized and focused on the legality of the behavior.
+1: general but not consistent congruence of positive verbal sociolegal judgment with behavior; value system externalized and focused on not getting caught.
0: positive verbal sociolegal judgment, but not supported by previous behavior or value system.
−1: fair verbal sociolegal judgment; some minor inconsistencies within categories.
−2: poor verbal sociolegal judgment; some major inconsistencies, maybe in more than one category.
−3: extremely poor verbal sociolegal judgment borne out by behavior that is mostly self-aggrandizing or self-gratifying.

Journal Policy on Multiple Authorship

It has come to our attention that there has been some misunderstanding regarding the *Journal's* policy on polyauthorship. The number of authors listed on a paper is not a factor in the review and acceptance/rejection procedure. However, once a decision has been made to publish a paper, we do apply *Journal* policy regarding the number of authors in the by-line: only principal researchers and writers of articles are listed in the by-line; collaborators who have provided technical and other assistance are acknowledged in a footnote. In papers that list more than 4 people as principal authors, we query the first author to verify that those individuals were substantial contributors to the research or ideas reported. Since certain types of psychiatric research may require multiple workers, we will of course include all of the names in these cases.

LETTERS TO THE EDITOR

Lithium and Depression

SIR: The excellent article "Overview: Maintenance Therapy in Psychiatry: II. Affective Disorders" by John M. Davis, M.D. (January 1976 issue) raises the issue of the treatment of depression with lithium, which aroused controversy for many years. Although data from uncontrolled studies have been conflicting, there is an emerging consensus from controlled studies that lithium *is* effective in the treatment of depression, with a greater likelihood of response expected in patients with bipolar illness, recurrent depressions, and a family history of affective disorders (1, 2).

Over the past several years I have observed phenomena in some bipolar and unipolar depressed patients which suggest that the achievement of adequate plasma lithium levels should be more carefully considered in these evaluations. Three bipolar patients in manic phases responded to lithium at plasma levels of less than 1.0 mEq/liter, first with an abatement of their manic symptoms and then with the emergence of a significant depression that was relieved in all instances by increasing the lithium dosage until a plasma level of greater than 1.0 mEq/liter was reached. Because of mild gastrointestinal symptoms, the lithium dosage for one of these patients was reduced by 300 mg/day, with a prompt return of depressive symptoms. The patient's serum lithium level was 0.8 mEq/liter at this time. Restoration of the additional 300 mg of lithium/day resulted in a rapid improvement of symptoms and a lithium level of 1.1 mEq/liter.

These data suggest a biphasic response of bipolar manic-depressive illness to lithium in some patients, with the depressed phase requiring higher plasma lithium levels (often greater than 1.0 mEq/liter) than the manic phase. This possibility needs to be evaluated carefully because of its obvious therapeutic and theoretical implications.

In four unipolar depressed patients, therapeutic results were also not observed until serum lithium levels greater than 1.0 mEq/liter were achieved. In one patient whose illness had been under good control with lithium for three months, a return of symptoms was noted to be related to an alteration in dosage by the patient from 300 mg four times a day to 600 mg twice a day. Symptoms were relieved by a return to the original dosage pattern, which suggests an extremely sensitive relationship between therapeutic response and lithium steady-state blood levels in this patient.

In my experience, in addition to the two variables noted above, other factors may also be useful in predicting which unipolar depressed patients are likely to respond better to lithium than to tricyclic antidepressants. The most common of these are increased sleep and appetite associated with the episode of depression and a transient period of a few hours to several days of feeling better than usual (athough not to a degree that could be classified as hypomanic), immediately followed by significant depression. These clinical impressions are in partial agreement with the findings of Kupfer and associates (3).

It is my opinion that the group of "unipolar" patients who respond best to lithium actually have a variation of bipolar illness (bipolar III?) in which the manic and/or hypomanic phases are not expressed clearly.

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Editor's note. The reader is referred to the article by Ronald R. Fieve, M.D., and associates earlier in this issue for more on this topic.

The Psychiatrist as an Expert Witness

SIR: The psychiatrist who testifies in court must accommodate to the roles and procedures of that system. He must cope with the criticism of peers who say that the psychiatrist has no place in the courtroom. I feel that this criticism is misdirected and results from a lack of understanding of our legal system and misconceptions regarding the role of expert witnesses.

In court, opposite sides allege different circumstances. The judge guides the proceedings in order to make relevant information available to the jury while keeping out prejudicial or inflammatory statements. The jury, which represents society at large, considers the evidence and reaches a decision. Additionally, in criminal cases, the jury is given a standard proof. The decision is not to be made by preponderance of evidence or with reasonable certainty but must be beyond a reasonable doubt. Ordinary, or fact, witnesses tell what they have seen; psychiatrists and other expert witnesses are allowed to express opinions. The adversary nature of our system of justice allows and requires each side to try as diligently as possible to introduce all favorable evidence and to suppress all unfavorable evidence. The goal of this process is justice, not truth.

The expert witness is allowed to express an opinion on matters beyond the knowledge or experience of the ordinary person. The judge designates a person as an expert witness in a particular field after hearing evidence that the individual has special training or experience. The expert witness is then allowed to express an opinion based upon application of his special knowledge to the facts in evidence.

The role of the expert witness is to assist the jury in consid-

ering a broad range of explanations, not to make the decision for the jury.

The expert witness is subject to cross-examination or challenge by the opposing side to ensure that his credentials as an expert are valid, that his opinion is well-founded, that his examination of the issues was adequate, and that his opinion does not go beyond the limits of his expertise and the facts that are available. Correspondingly, the advocate calling the expert witness seeks to validate and bolster his opinion.

Some psychiatrists serving as expert witnesses may fail to perform a proper examination, may reach unsound conclusions, exaggerate their testimony, be biased for or against one side, or allow themselves to be unduly influenced. All of these errors represent poor clinical practice, but they do not invalidate the role of expert witness in the legal system.

Those psychiatrists who do not understand the function and operation of the civil/criminal justice system or who find the ground rules and procedures not to their liking may choose to avoid participation. In my judgment, however, the psychiatrist who is skilled in understanding the legal issues, making an appropriate assessment, and putting forth his views has a valid role in the courtroom as an expert witness. He must be prepared for challenge and criticism, keeping in mind the function of his role—to provide a valid opinion, not to decide the issue.

BOB ROLLINS, M.D.
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Behavioral Theory in Psychiatric Education

SIR: Two articles in the *Journal* (1, 2) have outlined some proposals for specifics of psychiatric residency training. Although it is certainly true that the primary focus of such training should be the development of skills that enable the graduate psychiatrist to *do* psychiatry, it seems desirable that one should be familiar with the theoretical bases of one's activities. In perusing these articles I noted that a broad area of information, basic behavioral theory and research, was significantly underemphasized or not even acknowledged. Langee and associates (2) defined five categories of "what the resident needs to know," including among others "theories of individual psychological personality development" and "the biological determinants of behavior and emotion." However, they neglected the equally important need to know the basic psychological or behavioral determinants of behavior and emotion that in many cases form the theoretical underpinnings of those theories of personality development and behavior. One may counter by proposing, as has Baum (3), that a psychoanalytic core in resident education serves this purpose admirably. This may be true, but other areas of behavioral theory, including basic experimental psychology, have made and continue to make contributions to all fields of psychiatric knowledge, from behavior modification and biofeedback to the experimental analysis of group process. Drs. Yager and Pasnau (1) seem to be aware of the need for this type of instruction, but the emphasis in their paper is elsewhere.

The import of the body of behavioral knowledge is recognized by some. Freedman and associates devoted almost 5% of the total text of the *Comprehensive Textbook of Psychiatry* (4) to behavioral science. I wonder if others around the country who are designing and teaching residency programs are including this fundamental area. If they are not, shouldn't they be?

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Chronic Callers to a Crisis Center

SIR: The Honolulu Suicide and Crisis Center is primarily a telephone service manned by trained volunteers. Psychiatric consultants are available during the hours when the mental health centers are not open, as are outreach teams that can be sent out by the consultants. During the center's six years of operation, we have identified three major types of callers: the bona fide suicide and crisis caller, the crank caller, and the chronic caller. I would like to describe the chronic callers, who fall into five subtypes.

1. Individuals with chronic or recurrent crises that do require repeated intervention or suggestions.

2. Individuals with chronic or recurrent crises that the trained volunteers do not seem to be able to help. This group includes patients who are probably manic-depressive or unipolar depressives. Some are chronic schizophrenics who have managed to avoid contact with mental health clinics, despite the latters' vigorous outreach programs.

3. Isolated and lonely individuals who need someone to talk to. These people often call three or four times every night and stay on the phone for up to two hours. Some volunteers talk with them generously on slack evenings, while others soon reach their tolerance levels and become annoyed. Some volunteers feel sympathetic; others feel guilty. The volunteer often needs someone supportive and understanding on the staff with whom to discuss these situations. One way to cope with these calls is to tell the caller that he will be given 10–15 minutes to talk about his problems, after which the volunteer will have to terminate the call. We feel that this is better than telling the individual to stop calling, since he/she may at some point have a true crisis. However, we do not want to encourage these people to generate crises in order to call. We are considering organizing evening social clubs in collaboration with other agencies and members of the clergy because we do not think our center can function as a "phone-pal" club for these lonely people.

4. Sex callers who use the volunteers (usually those of the opposite sex) as the objects of obscene phone calls. Our volunteers are usually more annoyed by the inappropriate use of our service than by the behavior per se. Generally, they handle such calls by telling the individual that other more urgent calls have to be attended to. A few volunteers conduct some reality counseling with these people regarding the possible social and legal consequences of this behavior. As is the case with all callers who need treatment, the volunteer offers to help arrange a mental health clinic contact.

5. Alcoholic callers, who usually call after a few drinks. It might be interesting to test the usefulness of having bartenders volunteer to help these callers. At present, a sister agen-

cy (the Volunteer Information and Referral Service of Honolulu) answers for Alcoholics Anonymous after hours and has a list of AA workers to call when necessary.

ANTONIO J. DY, M.D.
JUSTIN VAN LOPIK
Honolulu, Hawaii

Treatment of Tardive Dyskinesia with Deanol

SIR: On reviewing the literature on tardive dyskinesia, one is struck by the lack of any definitive treatment for this distressing condition. Recently, deanol has been found effective (1). I would like to describe a case of such treatment.

The patient was a severely retarded 17-year-old girl who received thioridazine in a daily dose varying between 100 and 800 mg for the control of maladaptive behavior. After a little more than 2 years she developed purposeless, writhing, repetitive, involuntary movements of the legs, arms, hands, and neck. She vocalized constantly and her speech had become incomprehensible, her gait was ataxic, and she was falling frequently. She was not eating well and was losing weight. A diagnosis of tardive dyskinesia was made, thioridazine was discontinued, and she was given deanol in a dosage that was increased to 1200 mg/day. A gradual improvement in her condition was noted, although the symptoms seemed to recur if the deanol dosage was reduced. Finally, after a period of 3 months deanol was discontinued with no return of the previous symptoms.

Deanol appears to be a useful drug in the treatment of tardive dyskinesia and should be studied on a larger scale.

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Diagnosis and Treatment After CO Poisoning

SIR: "Carbon Monoxide Encephalopathy: Need for Appropriate Treatment" by Roy Ginsburg, M.D., and John Romano, M.D. (March 1976 issue) offers treatment recommendations that all physicians should appreciate.

The authors' suggestion that ECT should be avoided following exposure to CO poisoning is particularly cogent. ECT is commonly associated with a transient amnestic syndrome, and there are reports of ECT's resulting in a recurrence of neuropsychiatric sequelae if it is given within a month of recovery from CO poisoning (1). Electrical treatment should be avoided after CO poisoning (except in emergency situations) because it seems to complicate an ongoing organic process.

The anemia of the patient the authors described was certainly a factor in CO poisoning causing a chronic brain syndrome. The toxic action of carbon monoxide is by two mechanisms. First, the stronger affinity of hemoglobin for carbon monoxide than for oxygen results in what might be considered a "relative anemia." Second, the shift to the left in the oxygen dissociation curve means that oxygen tension must fall to much lower levels before the oxygen is released in the tissues. Thus anemia would result in an even greater degree of anoxia than expected (2), and the neuropsychiatric sequelae would probably be more severe.

The authors stated that diagnosis of this patient was difficult because of her fluctuating, bizarre behavior. Our investigation in this area suggests two points that might aid in diagnostic clarification. A delayed or fluctuating course may be a result of the slow demyelinating process that occurs after severe CO poisoning. Carbon monoxide is known to produce demyelination without significant neuronal damage; this phenomenon has been discussed in the literature as one that mimics psychiatric disease (3). The second fact is that the parietal symptomatology often present in these patients may be falsely diagnosed as hysterical.

Others have suggested that parietal lobe signs in CO poisoning may be more frequent than was thought previously (4). Unilateral neglect and the higher psychosensory and psychomotor phenomena associated with parietal pathology may appear bizarre and can be mistaken for psychiatric symptoms. Critchley (5) stated, "the lack of distress over the existence of a disability may be mistaken for the fatuous euphoria of the hysteric." I urge physicians to be aware that parietal lesions may be found after CO poisoning and that they can easily be misdiagnosed as a hysterical phenomenon.

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Putting Ethics Into Practice

SIR: In general, I agreed with the ideas expressed by Fritz Redlich, M.D., and Richard F. Mollica, M.D., in "Overview: Ethical Issues in Contemporary Psychiatry" (February 1976 issue). I would, however, strongly disagree with their statement that "Coercive treatment due to a patient's being dangerous or incompetent must be ordered by a court of law on the basis of evidence of such behavior and the value and availability of the treatment." This statement makes me suspect that Drs. Redlich and Mollica are some distance from general medicine. Psychiatric consultants in community general hospitals engage almost weekly in emergency coercive treatment, both medical and psychiatric, when it is not possible to obtain the permission of the slow-moving courts. For example, I recently participated in the physical restraint of an acutely schizophrenic 31-year-old man who had first- and second-degree burns of the chest. Two days after his intensive and involuntary treatment with haloperidol, he was awake and most grateful for my intervention, and he became a voluntary patient. During the same week, I also helped to care for an acutely ill patient with a cardiac arrythmia and delirium tremens. This patient broke a nurse's sternum while he was delirious, but he was released

from restraint after almost two weeks of delirium and was most appreciative of our coercive therapy. I am sure that this patient would have died had he not been cared for coercively without waiting for the court's permission.

If Drs. Redlich and Mollica agree with the treatment I have described, which I feel sure they do, they should have clearly stated this in their article. In addition to this kind of medical psychiatric problem, one often sees highly disturbed psychotic patients in an acute psychiatric setting, and may fortunately be able to treat them with intensive neuroleptics so that commitment to a state or county hospital is unnecessary; thus the patients are treated without formal consent of the court. In many instances, the patient is in remission by the time his/her case would have come up in court.

I think that in our rush to protect civil liberties we are sometimes denying treatment that patients would want if they were in their senses. I think we must face the fact that as responsible physicians we must sometimes make decisions for our patients and not be carried away by the "myth of total competence." To do so would be to align ourselves with Thomas Szasz and agree with him about the "myth of mental illness." There is a view similar to mine in the same issue of the *Journal* in "Crime and Violence Among Mental Patients" by Arthur Zitrin, M.D., and associates: "To oppose mandatory posthospital care for patients who are known to be at increased risk of dangerous behavior if not supervised is misguided civil libertarianism."

GEORGE A. ROGERS, M.D.
Camden, N.J.

Drs. Redlich and Mollica Reply

SIR: Dr. Rogers' comments address the moral question of how to help control a patient for his own benefit without having established a working alliance or being able to gain his informed consent. In general, coercive treatment in response to a patient's dangerousness or incompetence should be ordered by a court of law on the basis of the evidence of such behavior and the availability of such treatment. Also, coercive treatment should do no harm. However, we recognize that it is often the moral duty of a physician to undertake proper care for a patient in an emergency situation where informed consent is not possible and a court decision is too slow. A severe psychotic depression or Dr. Rogers' patient's burns would necessitate immediate treatment. A physician might even decide on the basis of "caring" in less acute situations to use commitment or restraints to prevent a dangerous situation from developing. The tragic case of the rape and murder of a disorganized woman at a railroad station in Washington, D.C., following the refusal of hospital psychiatrists at St. Elizabeths to treat her against her will highlights this dilemma. It is clear that these psychiatrists might have "broken the law" to help her.

What is obvious in both acute and chronic situations is that clinical responsibility often leads to moral conflict. Whenever a psychiatrist uses either physical or emotional restraints to restrict a patient's freedom without his informed consent, he is definitely in a state of moral conflict, balancing a patient's loss of autonomy and self-esteem against his own duty to care for and help the patient. Whatever the resolution of this dilemma, including the use of supralegal tactics, the physician must be aware of where he is going and why and be fully responsible for the consequences of his decisions. Understanding ethical and legal issues in extraordinary situations leads to increased moral clarity in a physician's everyday practice. Dr. Rogers focuses on moral dilemmas that must be clearly seen as such.

Dr. Rogers also highlights the ethical problems intrinsic to psychiatric consultations, where the psychiatrist is often called upon by his medical colleagues to help "control" a tough case. The consulting psychiatrist is frequently expected to use his pharmacological tools not only to help patients such as Dr. Rogers has described but also to medicate patients who are "troubling" the staff, the doctors, etc. Psychiatric units in a general hospital are often most culpable. Any psychiatric consultation requesting control of a patient's behavior is particularly fraught with moral conflict when the doctor-patient relationship, working alliance, and informed consent have not been developed. It is extremely difficult to exert moral leadership and a sense of "caring" in such situations.

FRITZ REDLICH, M.D.
RICHARD F. MOLLICA, M.D.
New Haven, Conn.

We're Still on the Boards

SIR: In "Experiences of Psychiatry Board Exam Casualties: A Survey Report" (March 1976 issue), Martin R. Lipp, M.D., made several valid points on possible improvements of the certification ordeal. Several of his suggestions deserve close scrutiny by the American Board of Psychiatry and Neurology. For example, I agree with his recommendation that "feedback must be included as an integral part of the examination procedure." Feedback should be given routinely to candidates who have failed the Boards, rather than being supplied only on request. This would help to eliminate or at least reduce any perception by the candidate of a defensive posture on the part of the Board. Also, I feel the success/failure ratios of all residency programs should appear in the *American Journal of Psychiatry* along with the list of successful candidates that is currently published in order to give new residents information regarding the capability of particular programs to prepare their trainees to pass the Boards. This would also enable residency programs to update their selection and training procedures and in the long run would contribute to the upgrading of standards of psychiatric residency education.

I took my Board exams in 1961 and felt that I was treated courteously by the examiners, who seemed to be interested in finding out what I knew rather than what I did not. At the end of the day, I felt that I had been "through the wringer," but I was glad for the experience and felt that I had been treated fairly. I am pointing this out in order to balance the comments cited by Dr. Lipp of six candidates who had failed their Boards.

I have been an examiner more than a dozen times, and I therefore have experiences that may cast some light on the subject of oral examinations. We must recognize that psychiatric interviewing is an intensely subjective discipline; any determination to introduce a dimension of objectivity is doomed to failure because subjectivity is the hallmark of psychiatric practice. We need to realize that making judgments on fellow human beings in our professional practice is a subjective enterprise that may be labeled as capricious, arbitrary, dictatorial, etc. In order to reduce the margin of error, we try to include in the evaluation process the professional experiences of several colleagues and to then formulate diag-

noses, therapeutic programs, etc., on the basis of the consensus thus developed. The same strategy is used by the Board in the following manner.

1. The candidate is examined by an examiner who is not involved in his training and does not know him socially.
2. Candidates are usually examined primarily in areas of their day-to-day professional practice and only peripherally in areas in which they do not have firsthand knowledge.
3. If the examiner does not feel competent in the areas of the candidate's primary interest, he usually disqualifies himself by bringing this fact to the attention of the director of the section, who tries as far as possible to match examiner and examinee expertise. (Each team consists of examiners who are of several different persuasions, although academic psychiatrists do predominate.)
4. There is usually another examiner in the room, and the head of the section drops in during the examination process. Each candidate is thus seen during the hour by two examiners, plus (in most situations) the head examiner. Different examiners' judgments may be contradictory and are therefore pooled in order to arrive at the candidate's final grade. This has been the strategy used by the directors under whom I have worked as an examiner. I am impressed by this system of checks and balances—examiners earnestly dispute and disagree with one another, which gives the candidate a fair chance and increases the margin of safety.

When the written examination was first introduced, these scores were compared with the candidate's grades on the oral examination. I was fascinated to note that there was a strong correlation between these two measures, which gives us some insight into this aspect of the subjectivity-objectivity dichotomy.

I propose that we should have an open debating forum at one of our annual meetings that would include two candidates who failed the Boards, two who passed, two examiners who have actively participated in the examination process, two members of the Board, and two members of the public. If this group actively exchanged ideas (without engaging in finger pointing), we would have a comprehensive perception of Dr. Lipp's concluding question: "In short, what are we doing to ourselves and to one another?"

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Kansas City, Mo.

Combining Lithium and Neuroleptics

SIR: "A Placebo-Controlled Study of Lithium Combined with Neuroleptics in Chronic Schizophrenic Patients" by Joyce G. Small, M.D., and associates (December 1975 issue) was a well-done and interesting study. However, although they reviewed the Cohen and Cohen report of irreversible brain damage in patients who received a combination of lithium and haloperidol (1), they placed surprisingly little emphasis on it.

Cohen and Cohen described four patients given a lithium-haloperidol combination who developed similar severe neurotoxic syndromes and went on to have irreversible central nervous system damage (two patients had dementia and dyskinesia and two had only persistent severe dyskinesia). This finding is especially frightening in view of the authors' prior safe experience with this combination in some 50 patients. Although it is poorly understood at this point, the most likely explanation of this finding is a drug interaction between lithium and haloperidol.

Dr. Small and associates advocate the addition of lithium to the treatment regime of certain patients on haloperidol and other neuroleptics. I think that the Cohen and Cohen findings contraindicate the combination of lithium and haloperidol for everyday clinical use until further research can elucidate the exact cause of the syndrome they described.

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Dr. Small and Associates and Dr. Shopsin Reply

SIR: We agree with Dr. Brust that all polypharmacy should be approached circumspectly. His concern about the haloperidol-lithium combination is well taken in light of the report by Cohen and Cohen, which on the surface implicates the combination in producing serious neurotoxic complications. However, their conclusions have since been critically evaluated and found to be rather misleading, serving to alarm the medical profession and possibly to deprive some patients of optimal medical treatment. Data on the safety of combined haloperidol and lithium treatment for appropriately selected and judiciously monitored psychiatric patients have not received the same widespread publicity. These issues were discussed recently in the *International Drug Therapy Newsletter* (1) and have been the topic of several important conferences held by McNeil Laboratories and the Food and Drug Administration (FDA), the proceedings of which have not been publicized. We invited Baron Shopsin, M.D., to coauthor this letter because we felt it essential to describe these official reviews in light of the negative climate that has been generated by the Cohen and Cohen article.

Shortly after the Cohen and Cohen article was published, a seminar on haloperidol-lithium interactions was held at McNeil Laboratories. Outside participants included Drs. Shopsin, Ayd, Mendels, and Tupin. Subsequently, all available data on lithium-neuroleptic combinations, including the Cohens' cases, were reviewed by the FDA. The official position that emerged from the conferences was that the combined use of lithium and haloperidol can continue within the guidelines of added caution suggested by the manufacturer.[1]

Several factors were considered in the FDA decision, including the conspicuous absence of similar reports of irreversible neurotoxicity despite the general use of the neuroleptic-lithium combination throughout the world for more than a decade. Further, careful review of the cases recorded by Cohen and Cohen has led to somewhat different conclusions about their possible etiology. Although the term "irreversible brain damage" was part of the article's title, only two of the four patients continued to show impairment. Two patients manifested tardive dyskinesia, which was present before treatment in one of them. Then, too, this is a *potentially* irreversible condition which is often remediable and which may occur with neuroleptics alone. Two of the cases Cohen and Cohen cited were elderly patients who would be prone to develop neurological and/or

[1]Information is available on request from McNeil Laboratories, Camp Hill Rd., Fort Washington, Pa. 19034.

other medical problems; one of them had suggestive organicity beforehand. Then, too, three drugs should be considered since benztropine was given along with lithium and haloperidol to three of the four patients. Benztropine and similar drugs can induce neurotoxicity (2–5), including toxic psychosis (6). Moreover, long-lasting neurological impairment (7) and even death (8) can result with either lithium or haloperidol alone.

A diagnosis of schizophrenia might have been more appropriate than manic-depressive illness for the Cohens' patients. Acute schizophrenia is considered to be a relative contraindication for lithium, although our report would suggest that in carefully selected, closely monitored patients lithium can be a helpful adjunct. Starting dosages of both drugs were moderate to high. Another disturbing aspect of the recorded cases was the continued use of these drugs for varying periods up to four days after serious if not critical physical and mental deterioration was recognized. Cohen and Cohen considered the possibility of encephalitic syndromes to be unlikely because there were no clinical signs of meningeal irritation and no evidence of inflammation or viral or other infection on laboratory tests. Nevertheless, the most sophisticated viral diagnostic studies do not always yield positive findings in documented cases of encephalitis, in part due to limitations of present methods (9). The occurrence of fever and abnormal enzyme and abnormal blood sugar tests in all patients, the singular outbreak of four cases at the same hospital within a given period of time, and the absence of similar problems before or since, despite continued use of the haloperidol-lithium combination at that institution, suggest a possible infectious etiology.

Human and animal studies are currently under way to investigate these issues further. However, until objective data are available to indicate otherwise, continued use of this drug combination can be carried out safely, effectively, and with FDA approval. The decision to use the combination, as with either drug alone, should be guided by assessments of physical and psychiatric diagnosis and attention to any underlying metabolic or other abnormalities. Serum lithium monitoring is required, but it is by no means a substitute for close clinical observation and careful dosage adjustments when necessary. Finally, although there should be no reluctance to use the combination where applicable, there should also be no hesitation to temporarily withhold or discontinue both drugs at once if significant deleterious effects develop.

We thank Dr. Brust for commenting on our study and the Editor for providing an opportunity to disseminate this information and expand discussion of the Cohen and Cohen report.

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Correction

The article "Agitated Psychotic Depression Associated with Severe Hypomanic Episodes: A Rare Syndrome," by Jonathan M. Himmelhoch, M.D., Patricia Coble, R.N., David J. Kupfer, M.D., and Jane Ingenito, R.N., M.S.N. (July 1976 issue) should have stated that the work reported was supported in part by Alcohol, Drug Abuse, and Mental Health Administration grant MH-24652 from the National Institute of Mental Health.

BOOK REVIEWS

The Sanctity of Social Life: Physicians' Treatment of Critically Ill Patients, *by Diana Crane. New York, N.Y., Russell Sage Foundation (Basic Books, distributor), 1975, 277 pp., $13.50.*

This book comes at an opportune time: the ethical aspects of medical practice are under close scrutiny. It is based on responses to over 3,000 questionnaires completed by physicians as well as a variety of extensive interviews with members of various medical specialties. The emphasis of the questionnaires and interviews was directed toward learning what physicians do rather than what they believe concerning the patient whose outlook is hopeless.

The author found that active treatment was most likely to be emphasized when the individual was capable of interacting with others in a meaningful way and least likely when the patient's condition was an entirely passive one. Positive euthanasia was a widespread practice for patients who had no capacity to live with any enjoyment. As yet, however, even negative euthanasia is not approved. As a result (because of technical devices that maintain life even in the absence of consciousness), many persons are kept alive at enormous expense to their families, to institutions, and to society.

This book is not easy to read, but it contains so much that is pertinent to present-day quandaries in medicine that the effort expended is well rewarded.

DANA L. FARNSWORTH, M.D.
Boston, Mass.

The Politics of Drugs: Marijuana to Mainlining, *by Richard C. Schroeder. Washington, D.C., Congressional Quarterly, 1975, 205 pp., no price listed (paper).*

The author's main theme in this book is an attempt to review the many contradictions in American attitudes toward drug use, although he views the United States as having a drug-oriented culture. Largely due to political foibles, he states, the Washington-based power merchants who dominate the drug field have spread "nonsense, misinformation, false propaganda, and panic" about drug use and abuse. Mr. Schroeder traces the changing strategies in law enforcement from 1914, when the Harrison Narcotic Act was passed, to the present. He reviews the many legislative acts and federal agencies that have been created and phased out.

In his opening chapter Mr. Schroeder reviews the myths and facts about drug abuse. In four following chapters he focuses on the many questions regarding marijuana (e.g., Is it harmful? Should it be legalized?). He then discusses such aspects of narcotics as classification, pharmacology, treatment, and international drug traffic.

The last two chapters emphasize the failure of law enforcement in the drug field in spite of the billions of dollars expended. He states, "The high cost of abuse [of drugs] is directly related to the policy of social prohibition [in this country] for more than half a century. . . . Drug use cannot be stamped out by legislative fiat." He warns that the goal of achieving a balanced view regarding drug use and abuse is very difficult to achieve in the face of changing political programs, the flaws in public information and education, distortions set forth by the mass media, and the enormous drug abuse "establishment," i.e., pharmaceutical companies, their lobbies in Washington, D.C., and the government drug abuse bureaucracy.

The sources for the author's material come largely from his review of reports of national commissions, congressional acts, national magazine research accounts, and reports of the privately based Drug Abuse Council, a group he has worked with extensively. The largest number—17—of his suggestions for readings are Drug Abuse Council publications. Next—15—are government documents and publications. There are only a few references to medical articles.

This book is well written, more in the style of the science writer who has amassed a great deal of data about subject matter that is still controversial. Mr. Schroeder's style affords him an opportunity to express opinions and value judgments. His view of drug abuse and addiction is more in tune with a sociological model than the medical model.

MANUEL M. PEARSON, M.D.
Philadelphia, Pa.

Identity Group Psychotherapy with Adolescents, *by Arnold W. Rachman, Ph.D. Springfield, Ill., Charles C Thomas, 1975, 299 pp., $16.75.*

This book's theoretical framework is drawn primarily from Erik Erikson's eight stages of man (1), chiefly from the fifth stage, the identity-versus-role-diffusion phase of adolescent development. The fifth stage task of psychological identification is translated from developmental theory into a practical practice labeled "group identity psychotherapy" that is faithful to Erikson's theory. The goal of this therapy is to help adolescents successfully achieve resolution of an existing identity crisis; the specific psychotherapy, described in detail, is prescribed for adolescents who, for one reason or another, are failing to achieve adequate resolution of that evolutionary stage in personality development.

The book reads easily. It is developed clearly, step by step, from theory into practice. It remains faithful to its heritage—Erikson's ego psychology by way of Freud's psychoanalytic theory.

It would be easy to go along with many assumptions in the text because of the manner of presentation of the material. For example, it is implied that the core of all adolescent psychological problems focuses on an ego developmental abnormality (identification crisis) and that nearly all adolescents can best be treated by the group therapy process discussed in the text. Dr. Rachman concentrates so much on his commitment to the recommended theory and derived therapy

that he might rightly be criticized as opinionated rather than scientific. However, I have no fundamental criticism of this aspect of the book because the scientific validity of all of the various psychotherapies continues to be a matter of divergent opinion; this book simply accepts one of them—a respected and valued one at that.

There are a number of typographical and editing errors in this book, the most glaring of which is a major misprint in the listing of the chapters. The book is well referenced, and there is a useful subject index.

I highly recommend the book to everyone treating adolescents rather than just theorizing about them. It takes a notable theory and translates it into a sensitive, practical, detailed, and responsible psychotherapy for adolescents. It serves as an informative and compact review of a broader concept for those who may be too narrowly or too intensively involved in individual or group adolescent psychotherapy. I would also recommend this book as an excellent text for use as a teaching and learning guide for those thinking of developing skill in group psychotherapy with emotionally troubled adolescents.

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RICHARD E. DAVIS, M.D.
Grand Forks, N.D.

Understanding Human Behavior for Effective Police Work, *by Harold E. Russell and Allan Beigel. New York, N.Y., Basic Books, 1976, 293 pp., $13.95.*

This textbook is designed to assist the police in understanding behavior as they work in the field. When one considers the emphasis on professional training for police officers in the United States and the input of mental health professionals into this training, it is easy to see the interest this book has for readers of this journal. In addition to writing a textbook for the police, the authors have also made available a source book for mental health professionals who are teaching the police.

The professional role of the police officer has changed significantly as society has undergone social, legal, and moral change. This book highlights the professionalism of the police and supplies them with an opportunity to improve the level of their work.

After a discussion of aspects of the changing role of the police officer, the book is divided into the three following parts: The Origins and Complexities of Human Behavior, Understanding Mental Illness, and Assessing and Managing Abnormal Behavior in the Field.

The section on human behavior contains an excellent chapter on normal growth and development that has a decidedly psychodynamic orientation as well as many references to Freudian theory. The explanations of defense mechanisms and a chapter on abnormal behavior are very well done and could be used to instruct such groups as teachers, nonpsychiatrist physicians, and the clergy.

In the section on understanding mental illness, the brief but elegant chapters titled "Classification of Abnormal Behavior," "Personality Disorders," "The Neuroses," and "The Psychoses" include relevant case examples. The case examples throughout the text attempt to describe clinical syndromes as seen through the police officer's eyes.

A most valuable part of this book is the section dealing with the management of abnormal behavior. Not only are various kinds of behavior described (e.g., psychopathic behavior, deviant sexual behavior, and delinquent behavior), but the reader is given a series of "helpful hints" for the law enforcement officer in relationship to each behavior. These are in no way cookbook rules; rather, they provide an opportunity to exercise judgment based on an understanding of what has been discussed in the section. From the point of view of the mental health professional, the chapters on violent behavior and suicidal behavior are as well written as any I have seen. There are also excellent chapters on aspects of riots and disaster. The authors present a code of conduct for police officers during civil disturbances and riots.

The last chapter contains a discussion of such legal issues as criminal responsibility, competency, and confidentiality. This discussion is of use to a great variety of professional people.

This is an extremely well written book containing excellent case examples; it is enjoyable to read as well as quite sophisticated. I strongly recommend this book not only for professional police officers but also for professionals who are teaching police officers, participating in the selection of police officers, or performing preventive psychiatry in a variety of settings.

ALAN M. ELKINS, M.D.
Portland, Me.

Armed Robbery: Offenders and Their Victims, *by John M. Macdonald, M.D. Springfield, Ill., Charles C Thomas, 1975, 438 pp., $18.50.*

Crime is a human behavior, and as such it ought to interest psychiatrists more than it does. Understandably, there is revulsion in dealing with the subject, and our profession generally tends to view criminals as belonging in the forensic realm, as people who ought to be dealt with by the police. In this respect, the series of volumes by John Macdonald over the years on the criminal, murder, rape, indecent exposure, and now armed robbery constitute valuable texts for clinicians who wish to become more familiar with these subjects. Macdonald is a psychiatrist with a wealth of clinical and forensic experience. In one of his earlier volumes (1) he studied a large group of homicidal psychiatric patients; in this volume he analyzes 1,000 armed robberies with the help of members of a police department. He finds that 1 in 250 ended in homicide.

The volume contains anecdotal accounts of robberies, including bank robberies and skyjackings, plus some attempts to understand the history of robbery, accounts of famous robbers, and discussions of society's attitudes toward and identification with the robber and the effects of punishment (this is handled superficially in the book). Psychological understanding of the armed robber, his or her motives, the acts that get him or her caught, and some psychodynamics will interest the reader. There is a great deal of descriptive material, and there are many anecdotes, some of which are quite frightening.

The book is long but generally well referenced. One can use it as a reference text or can read it lightly in an evening to understand how the police act, what the criminal is like, and where armed robbery occurs and to become acquainted with a class of offenders unfortunately prevalent in our society.

I recommend this book, although Macdonald's earlier book titled *Psychiatry and the Criminal* (1) fulfills something of the same goal and would more generally acquaint the clinician with the problems of crime. *Armed Robbery* deals more in depth with one type of crime, criminal, and victim.

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JOHN R. LION, M.D.
Baltimore, Md.

The Patient and the Therapist: New Light on the Psychotherapist, *by Arthur Burton. Sacramento, Calif., Hamilton Psyche Press, 1975, 168 pp., $8.95.*

In this collection of 13 essays, 8 of which have been published before, Burton's intent is to focus upon "the humanness and genuineness of the healer as opposed to his screen, reflective and cognitive purpose." That both affect and intellect are central to the therapist's armamentarium is given suitable acknowledgment, but it is the affective and human side that is the concern in this book.

Burton refers to the profusion of therapies, the plethora of hypotheses, and the variegated therapeutic styles that all lay claim to healing. Encounter groups, primal scream therapy, and transactional analysis, as well as a variety of apparently subsiding counterculture experiences (including the drug scene), compete with and often enough deride psychoanalytic psychotherapy and psychoanalysis. To some extent the style of this book mirrors the voices and advocates that are heard from all sides. The style does not displease; indeed, it reflects broad experience, openness, and inquisitiveness. However, in an apparent wish to touch a great many bases the author darts about in a somewhat breathless fashion.

The book contains useful insights, as when Burton refers to wild therapists and wild analysts who have a tremendous unconscious need either to flee from therapeutic intimacy, to participate even more deeply in it, or to innovate as an end in itself. On the other hand, from a previous study of therapists Burton posits that the psychological background of a therapist is one in which he idealizes his father and often depreciates his mother. This seems based on very thin ice indeed. Further, Burton reports that few of the healers he studied had kind words to say about their training analyses. All felt with great certitude that their true growth came from and with their patients. Let me be recorded in a different mode: growth in terms of range, experience, and clinical acumen certainly comes from diligent work with patients, but I will number myself among those whose greatest growth came from my training analysis.

There are essays on the lives and therapeutic styles of therapists, sources of therapist satisfaction, and the therapist as a patient. The chapter on the presentation of the therapeutic face is a particularly useful contribution because it calls to our attention the therapeutic face as nonverbal communication and transference screen. In addition, the therapeutic face has an array of reactions that are read, assumed, or acted out. In the chapter on hope and psychotherapy Burton calls for an extensive discussion that can be touched only in the sense that the place of hope in psychotherapy might have been linked with the place of fantasy, expectation, and denial.

In the final chapter, which concerns the therapy of the nondiseased person, Burton describes an experiment in which he treated individuals who neither needed nor wanted psychotherapy. It would have been helpful if the concepts of character, character traits, and character disorder had been included in the book, but one suggestion cannot escape notice. Burton states that therapists fear their patients' impulses, their acting out, and even their creativity. If by acting out Burton means the transformation into behaviors of fantasies, impulses, and conflicts that are in the process of being worked through in the therapy, the therapist who identifies and deals with acting out for what it is does not have such difficulty.

Burton presents us with an eclectic view of an aspect of the current psychotherapeutic scene in the United States. The problem is to distinguish eclecticism from bedlam.

JACOB SWARTZ, M.D.
Boston, Mass.

Hypnotics: Methods of Development and Evaluation. Proceedings of the Brook Lodge Conference on Hypnotics, *edited by Fred Kagan, Theresa Harwood, Karl Rickels, Allan D. Rudzik, and Heinz Sorer. New York, N.Y., Spectrum Publications (Halsted Press, John Wiley & Sons, distributor), 1975, 416 pp., $30.00.*

In his introduction Dr. Kagan asserts that previous symposia on sleep have devoted themselves to the phenomenology of sleep and ignored the pragmatic aspects of evaluating and developing drugs to treat sleep problems. Herein lies the value of this book. After first presenting an overview of sleep disorders and their treatment, the various contributors then address themselves to methods for the clinical evaluation of hypnotics. The remainder of the volume is divided into two other major sections. One concentrates on evaluation of addiction liability, a topic of great practical importance in determining suitability of hypnotics for an individual patient. The second and final section contains several chapters on the metabolism and adverse effects of hypnotics.

No up-to-date consideration of the applicability of psychotropic drugs is complete without a review of the current knowledge derived from studies of drug metabolism, including pharmacokinetics, rate of drug turnover, individual variation, and the regulatory role of microsomal enzymes in the liver. Leibman and Alvares in separate chapters discuss the more basic aspects of these subjects, and Azarnoff addresses the clinical implications of changes in drug metabolism.

This volume is compiled from the proceedings of the Brook Lodge Conference on Hypnotics held in Augusta, Mich., in July 1974. Many symposia suffer from a time lag. As a result, information in print may summarize findings two or three years old. The present editors have avoided that pitfall by rushing their proceedings into print in a relatively rapid time. As a result, the findings are still fresh and current. Another major weakness of most printed symposia are the discussions that follow formal presentations. The discussion period is often filled with somewhat repetitive and occasionally irrelevant questions that the speaker is often hard put to answer. This does not appear to be the case in *Hypnotics*. Either such questions were not asked or, more likely, they were carefully edited out. Many facts are brought up in the discussions; this enhances the timeliness of the book be-

cause they recount even more recent data than is discussed in the formal paper or contain the findings of coworkers who were not on the formal program. Another feature of this book that should be very helpful is the references, which apply not only to the formal presentations but to the material covered during the discussions as well.

The least valuable part of the book is the section on evaluation of addiction liability. Perhaps because of its roundtable format and the large number of formal participants (six), as well as numerous comments from the audience, it was difficult to come away with any clear-cut pattern of conclusions that would be of clinical value in determining addiction liability. Too often, just as one participant was beginning to explore material in depth, the subject was changed either by another participant or an audience member. Perhaps this cannot be avoided at round tables. Unfortunately, they frequently do not "read" well; this chapter is no exception to this observation.

In spite of this minor criticism, the volume is a worthwhile investment for anyone seriously interested in the subject of hypnotics.

SIDNEY MALITZ, M.D.
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Perinatal Addiction, *edited by Raymond D. Harbison. New York, N.Y., Spectrum Publications (Halsted Press, John Wiley & Sons, distributor), 1975, 384 pp., no price listed.*

The papers in this informative book were presented at a 1974 conference cosponsored by the National Institute on Drug Abuse (NIDA) and Vanderbilt University, Nashville, Tenn.

Psychiatrists can learn a great deal from this book about the impact of maternal drug and alcohol use on the developing fetus. Several papers provide excellent descriptions of neonatal withdrawal and its management. This information will facilitate communication between psychiatrists and pediatricians; however, there is little help here for the psychiatrist called in as a consultant.

An overall emphasis on developmental pharmacology is reflected in the book's title. The terms "addict" and "addiction" occur in the titles of 6 of the 26 papers. The authors, all of whom are pediatricians or pharmacologists, use these terms to refer only to physiological, not to psychological, dependence in affected infants. Neutral descriptive phrases such as "neonatal abstinence syndrome" are used in some instances in the book. These neutral phrases may be more awkward, but they are preferable to such negative labels as "addict" when applied to newborn children.

The most useful paper, from a psychiatric point of view, is Coppolillo's, titled "Drug Impediments to Mothering Behavior." He describes genetic, characterological, and environmental factors that impair parenting skills. Coppolillo advocates early and repeated maternal contact with each newborn baby but does not accompany this excellent advice with technical suggestions. Psychiatrists attempting to help facilitate parent-child bonding must find their own course between the Scylla of medical treatment, which may isolate or sedate the infant, and the Charybdis of maternal avoidance stemming from anxiety, guilt, and low self-esteem.

Important issues concerning the treatment and prevention of alcohol and drug dependence are raised by this book. The disturbing sequelae surrounding pregnancy and delivery are well described. Obviously, a great deal remains to be done in developing effective psychiatric treatment of affected mothers and their families.

Although written primarily by and for pediatricians and pharmacologists, *Perinatal Addiction* serves as a challenge to psychiatrists to become involved in finding ways of managing and preventing this complex problem.

JOHN N. CHAPPEL, M.D.
Reno, Nev.

Bereavement: Its Psychosocial Aspects, *edited by Bernard Schoenberg, Irwin Gerber, Alfred Wiener, Austin H. Kutscher, David Peretz, and Arthur C. Carr. New York, N.Y., Columbia University Press, 1975, 367 pp., $15.00.*

This volume reflects the continuing energetic efforts of the Foundation of Thanatology. This organization produces annually a collection of papers oriented toward a particular aspect of the theme of dying, death, or bereavement. This book is identical in format to the previous ones in this series. Included are 31 chapters of varying length, style, lucidity, and significance. The chapters are distributed among five parts: Fundamental Concepts, The Bereavement Process, The Bereaved Family, The Health Professional, and Therapeutic Intervention.

Several of the chapter authors are well known in the field, e.g., Clayton, Krant, Parkes, and Silverman. Despite this fact, the book lends itself to criticism in that many of the topics relating to bereavement have been covered in previous books sponsored by the Foundation of Thanatology (1, 2).

Nevertheless, some of the chapters appealed to me. "The Process and Phenomenology of Bereavement" by Wiener and associates is a prospective study of families. An important finding of these authors is that the number of deaths, major hospitalizations, and psychiatric decompensations did not increase following bereavement. This finding is in contrast to the prevalent assumption that the opposite is true. Wiener and associates did note an increase in the number of doctor visits, use of medications, and number of subjective symptoms, however. In "Studies in Grief," Schwab and associates state that 50% of the bereaved population they studied displayed intense grief reactions more than one year after the loss.

Lerner's article, "Changes in Attitudes Toward Death: The Widow in Great Britain in the Early Twentieth Century," is interesting from a historical point of view. Parkes's chapter, "Unexpected and Untimely Bereavement: A Statistical Study of Young Boston Widows and Widowers," should encourage the reader in the direction of his book, which considers the topic in depth (3).

Rosenblatt's chapter, "Uses of Ethnography in Understanding Grief and Mourning," provides a useful background perspective for workers in the field. He cautions professionals to be aware of the "possibility that self-fulfilling prophecy may lead to the adoption of suboptimal practices." In a similar vein, in "The Health Professional" Krant discusses in an attractive and sobering style the difficulties encountered by the researcher, not only in terms of the hypotheses but in terms of carrying out the practicalities of the project.

Showalter's overview, "Parent Death and Child Bereavement," and Schoenberg and associates' "Advice of the Bereaved for the Bereaved" present welcome specific approaches to the problem of support for the grief stricken of all ages.

I would suggest that grief and its mental expression, mourning, are responses to any actual or threatened separation, not only to the loss of a loved one. One cannot "help" those who mourn in advance of the loss or through psychological clichés. Kutscher and Kutscher state in their preface, "Care must be taken lest the humanitarian dimensions of psychosocial concepts be diminished by intellectual detachment." I could not agree more (4).

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NATHAN SCHNAPER, M.D.
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Modern Perspectives in the Psychiatry of Old Age, *edited by John G. Howells, M.D., D.P.M., New York, N.Y., Brunner/Mazel, 1975, 604 pp., $20.00.*

This book provides a surfeit of riches for the clinician, the teacher, and any serious student of aging. It often goes beyond the limits of its title to provide information, data, and views of value to fields other than psychiatry, such as psychology, sociology, and ethics. As a compendium it has some flaws, but these are a small price to pay for the breadth and variety of views expressed.

Of particular importance are the several chapters in which the personal styles and viewpoints of several very experienced writer-clinicians are expressed. As an example, the general subject of treatment and the attitudes of the treater are dealt with in chapters on psychopathology, psychoneurosis, associated organic status, and death and dying, to name only the outstanding examples. Each of these deals well with its own subject, but the astute reader can learn much from the differing viewpoints and styles.

Of special interest to readers in the United States should be several chapters written by non-Americans. These include the chapter on epidemiology by N. Juel-Nielsen of Denmark, the one on concomitant physical states by Anderson and Davidson of Scotland, the one on nosology by Bergmann of England, the one on psychosomatic states by Stenbäch of Finland, and the one on confusional states by Kral of Canada.

A truly outstanding chapter is the one by Professor Sternberg of Russia. It was a joy to note the precision in this author's use of English, especially in the preamble, and the equally precise logic in the initiation of the central idea. The construction and progression of the logic of the chapter is an excellent example of clarity in medical writing. The device of nosology is used as a vehicle for presenting some views about diagnosis and treatment that, but for the deftness of their presentation, might arouse resistance. Also clearly apparent is the strength of the opinions or views expressed; if one were so inclined one could read into the style a hint of rigidity and work by committee. The basic concept presented—that continuity of the aging process should dictate continuity of specialized services to meet needs regardless of chronological age—is being advanced elsewhere (1, 2).

The psychology of aging is dealt with in two chapters, one by American and one by British authors, thus giving the reader a chance to make some interesting comparisons. I found Fozard and Thomas' article informative and lucidly written even though it presented complex research findings. In my view this chapter alone justifies reading the book; it has the most current data of any of the chapters and has a most complete bibliography. Another subject these authors clearly describe in some depth is the differential effects of age on the various abilities of intelligence, attitudes, and behavior. Knowledge of these differences gives the clinician a scientific basis for sound treatment plans and a hopeful attitude toward the elderly. This is especially true when one realizes that some intellectual capacities do not reach their peak performance until the individual's fifth and sixth decades.

Any book by many authors must have some unevenness or shortcomings, only a very few of which are substantial in this book. The initial chapter is disappointing because it does not present newer knowledge about the structure of chromosomes and its relationship to differential aging or to cellular or protoplasmic aging.

Also absent from the book is reference to some of the most recent advances in diagnostic aids, such as the neurological index of mental impairment (NIMI) (3, 4). This test attempts, usually successfully, to identify and quantify very early or incipient intellectual deficit when it is most difficult to identify but when it would be most helpful for subsequent management.

Also missing is reference to the electronically magnified image (EMI) (5–8), a noninvasive, more reliable X-ray means of visualizing intracranial pathology. I would also like to have seen the inclusion of newer workers such as Butler and Pattison and established writers such as Busse, Schneideman, and Simon, but a line must be drawn somewhere.

A chapter on alcohol and other drug abuse by the elderly would also have been of great usefulness, as would a special emphasis on the correction of sensory deficits of aging, especially the most pressing problem of impaired hearing. The impact on emotional health of several social factors such as housing, income level, transportation, and de facto discrimination is of increasingly recognized importance but is not dealt with in this work.

I read the book as a clinician in private practice, as a teacher, and as a health administrator and found it useful in each area. It should be widely used in medical schools and graduate courses in several fields. Fortunately, it is nontechnical and readable enough to be of value to the well-informed layman, and mental health workers will find it an easy book to browse through and to read. A major asset is that nearly every chapter has extensive references that will make the book especially valuable to researchers. Both the author index and the general index were more than adequate. In summary, this book is a period piece deserving a place on the bookshelf of anyone with a serious interest in teaching or learning about aging.

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8. Ambrose J: Computerized transverse axial scanning (tomography): part II. Clinical application. Br J Radiol 46:1023–1047, 1973

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Program Evaluation: Alcohol, Drug Abuse, and Mental Health Services, *edited by Jack Zusman and Cecil R. Wurster. Lexington, Mass., Lexington Books (D.C. Heath and Co.), 1975, 272 pp., $14.00.*

This pioneering book explores the new and rapidly evolving art and science of evaluating human service programs. Industry monitors its productivity by cost-effectiveness studies. Health delivery systems are now being asked to do the same. The people who pay for these services either directly or indirectly, through taxes or insurance premiums, have a right to know how their money is being spent. This book deals with the problems encountered as well as the progress being made in trying to evaluate treatment results in the intangible fields of alcoholism, drug addiction, and mental illness.

The need for such analyses is apparent. If our increasingly limited resources are to be used to their best advantage, we have to know which programs really help and which do not. The technical difficulty of obtaining a valid appraisal is compounded by the natural reluctance of most practitioners or agencies to risk an adverse survey. Negative self-evaluations are hushed up as potentially self-destructive. Outside surveys are costly, interfere with the primary work of the facility, sacrifice confidentiality, and can be damaging if the results are interpreted incorrectly or released inappropriately.

The use of evaluations as a political tool to support or destroy programs is an ever present danger. Distorted interpretations of accurate raw data can be used by the government to validate projects that are ineffective and to lull the public into believing that "something is being done" to "solve" community problems. Clinically effective services that are too costly (e.g., state hospitals) can be dismantled under the guise of an adverse systems analysis.

Appraisals of programs are usually made after a project has been started and committed to a course of action. Evaluations at this stage can be of assistance if they help to improve performance, promote a wiser allocation of resources, and define realistic goals. Whenever possible, the emphasis should be on education rather than regulation.

Although this book does not discuss those surveys with which most of us are familiar, such as those of the Joint Commission on the Accreditation of Hospitals, Professional Standards Review Organizations and other peer-review groups, utilization review groups, and licensing boards, it is pertinent to these endeavors. Our own medical journals have always published excellent studies of treatment outcome. Few articles, however, examine the cost effectiveness of our psychiatric treatment modalities. Perhaps it is time to research this aspect of our practice as well.

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The Practice of Mental Health Consultation, *edited by Fortune V. Mannino, Beryce W. MacLennan, and Milton F. Shore. New York, N.Y., Gardner Press (Halsted Press, John Wiley & Sons, distributor), 1975, 241 pp., $12.95.*

This volume is a collection of articles by 14 contributors based on the authors' experiences in Prince Georges County, Md. It is the goal of the editors to make available the insight gained in these experiences in a variety of circumstances. The editors summarize the contents of the book very well in their preface:

> The book covers several areas of consultation. The first chapter deals with the definition and scope of consultation from the perspective of a community mental health center. The second chapter covers the research literature on the effectiveness of consultation. Chapters 3 through 7 are descriptive reports of consultation programs in a variety of community settings, including schools, day care centers, the police, and the new youth-oriented programs. Chapter 8 describes experiences in the training of mental health consultants. Chapter 9 offers a number of vignettes which illustrate some of the key issues and problems in the planning, implementation and practice of mental health consultation. Finally, the appendix offers a complete revision of the report entitled, Consultation in Mental Health and Related Fields: A Reference Guide. Originally published in 1969, the Reference Guide is now both outdated and out of print. The revision updates the Guide through 1973.

This book should serve as a valuable reference for mental health practitioners and an even more valuable text for college courses. The latter purpose warrants exploration by educators who may have overlooked mental health consultation as a viable occupational goal for their students. The practitioner will find descriptions of various settings in which consultation takes place; the details of this process, including problems inherent in mental health consultation, are especially useful.

The major weakness of the book is the failure to provide more detail regarding the problem of funding consultation services. Although the editors state that the problem of funding is a reality, they fail to provide information that would be helpful to administrators regarding cost analysis and contract negotiations for consultation programs.

The reference guide is extensive and comprehensive and should prove extremely valuable and helpful to anyone interested in mental health consultation.

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This Month's Reviewers

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publisher.

The Meditation Handbook, *by Tom Alibrandi. Chatsworth, Calif., Major Books, 1976, 148 pp., $1.25 (paper).*

Comprehensive Psychiatric Care, *edited by AA Baker, C.B.E., M.D. Oxford, England, Blackwell Scientific Publications (Philadelphia, Pa., J.B. Lippincott Co., distributor), 1976, 287 pp., $21.50.*

Basic Child Psychiatry, 2nd ed., *by Philip Barker, M.B., D.P.M., D.C.H. Baltimore, Md., University Park Press, 1976, 268 pp., $14.50*

The Reality Therapy Reader: A Survey of the Work of William Glasser, M.D., *edited by Alexander Bassin, Ph.D., Thomas Edward Bratter, Ed.D., and Richard L. Rachin, M.P.A. New York, N.Y., Harper & Row, 1976, 673 pp., $15.00.*

Save Your Marriage, *by Barry Robert Berkey, M.D. Chicago, Ill., Nelson-Hall, 1976, 290 pp., $9.95.*

Psychology of Deafness for Rehabilitation Counselors, *edited by Brian Bolton, Ph.D. Baltimore, Md., University Park Press, 1976, 149 pp., $14.50.*

Principles of Learning and Memory, *by Robert G. Crowder. Hillsdale, N.J., Lawrence Erlbaum Associates (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 505 pp., no price listed.*

The Behavioral Management of Anxiety, Depression and Pain, *edited by Park O. Davidson, Ph.D. New York, N.Y., Brunner/Mazel, 1976, 188 pp., $13.50.*

Mechanisms in Transmission of Signals for Conscious Behaviour, *edited by T. Desiraju. Amsterdam, The Netherlands, Elsevier Scientific Publishing Co. (New York, N.Y., American Elsevier Publishing Co., distributor), 1976, 366 pp., $46.25.*

The Hungry Fly: A Physiological Study of the Behavior Associated with Feeding. A Commonwealth Fund Book, *by V.G. Dethier. Cambridge, Mass., Harvard University Press, 1976, 477 pp., $30.00.*

Emotional Problems of Living: Avoiding the Neurotic Pattern, 3rd ed., *by O. Spurgeon English, M.D., and Gerald H.J. Pearson, M.D. New York, N.Y., W.W. Norton & Co., 1976, 610 pp., $5.95 (paper).*

Alternative Education: A Source Book for Parents, Teachers, Students, and Administrators, *edited by Mario D. Fantini. Garden City, N.Y., Anchor Press/Doubleday, 1976, 488 pp., $4.50 (paper).*

Overcoming Agoraphobia: Coping with the World Outside, *by Muriel Frampton. New York, N.Y., St. Martin's Press, 1974, 93 pp., $5.95.*

Perspectives on Aggression, *edited by Russell G. Geen and Edgar C. O'Neal. New York, N.Y., Academic Press (Harcourt Brace Jovanovich), 1976, 260 pp., $15.00.*

Pharmacokinetics of Psychoactive Drugs: Blood Levels and Clinical Response, *edited by Louis A. Gottschalk, M.D., and Sidney Merlis, M.D. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 250 pp., no price listed.*

Human Resources for Troubled Children, *by Werner I. Halpern, M.D., and Stanley Kissel, Ph.D. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 247 pp., $17.95.*

Human Experimentation and the Law, *by Nathan Hershey, LL.B., and Robert D. Miller, J.D. Germantown, Md., Aspen Systems Corp., 1976, 164 pp., $15.00.*

Brain Metabolism and Cerebral Disorders, 2nd ed., *edited by Harold E. Himwich. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 361 pp., $28.00.*

Developmental Disorders: Assessment, Treatment, Education, *edited by Robert B. Johnston, M.D., and Phyllis R. Magrub, Ph.D. Baltimore, Md., University Park Press, 1976, 515 pp., $14.50.*

The Mentality of Apes, 2nd ed., *by Wolfgang Köhler; translated by Ella Winter. New York, N.Y., Liveright, 1976, 329 pp., $3.95 (paper).*

The Place of Value in a World of Facts, *by Wolfgang Köhler; New York, N.Y., Liveright, 1976, 312 pp., $3.95 (paper).*

Responsible Assertive Behavior: Cognitive/Behavioral Procedures for Trainers, *by Arthur J. Lange and Patricia Jakubowski. Champaign, Ill., Research Press, 1976, 323 pp., $6.95 (paper).*

Multimodal Behavior Therapy, *by Arnold A. Lazarus. New York, N.Y., Springer Publishing Co., 1976, 231 pp., $12.95.*

Psychological Man, *by Harry Levinson. Cambridge, Mass., Levinson Institute, 1976, 147 pp., $5.95.*

Mechanisms of Neurological Disease, *by Anthony J. Lewis, M.B., B.S. Boston, Mass., Little, Brown and Co., 1976, 524 pp., $20.00.*

Death in Life: Survivors of Hiroshima, *by Robert Jay Lifton. New York, N.Y., Touchstone (Simon and Schuster), 1976, 576 pp., $5.95 (paper).*

Revolutionary Immortality: Mao Tse-tung and the Chinese Cultural Revolution, *by Robert Jay Lifton. New York, N.Y., W.W. Norton & Co., 1976, 170 pp., $2.95 (paper).*

Rehabilitation Medicine and Psychiatry, *edited by Jack Meislin, M.D. Springfield, Ill., Charles C Thomas, 1976, 500 pp., $24.75.*

Hysterectomy: A Complete, Up-to-Date Guide to Everything About It and Why It May Be Needed, *by Nancy Nugent. Garden City, N.Y., Doubleday & Co., 1976, 169 pp., $6.95.*

You Are Not Alone: Understanding and Dealing with Mental Illness. A Guide for Patients, Families, Doctors and Other Professionals, *by Clara Claiborne Park with Leon N. Shapiro, M.D. Boston, Mass., Atlantic–Little, Brown, 1976, 480 pp., $15.00.*

The Origin of the Idea of Chance in Children, *by Jean Piaget and Bärbel Inhelder; translated by Lowell Leake, Jr., Paul Burrell, and Harold D. Fishbein. New York, N.Y., W.W. Norton & Co., 1976, 251 pp., $3.95 (paper).*

Human Behavior and the Helping Professions, *by Otto Pollak, Ph.D. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 86 pp., $7.95.*

Mental Health Counseling with Children, *by Patricia C. Pothier, R.N., M.S. Boston, Mass., Little, Brown and Co., 1976, 234 pp., $12.50 (paper).*

The Problem Clergymen Don't Talk About, *by Charles L. Rassieur. Philadelphia, Pa., Westminster Press, 1976, 157 pp., $3.95 (paper).*

Awakenings, revised ed., *by Oliver Sacks. New York, N.Y., Vintage Books (Random House), 1976, 344 pp., $2.95 (paper).*

The Sexual Experience, *edited by Benjamin J. Sadock, M.D., Harold I. Kaplan, M.D., and Alfred M. Freedman, M.D. Baltimore, Md., Williams & Wilkins Co., 1976, 654 pp., $23.50.*

Hyperactive Children: Diagnosis and Management, *by Daniel J. Safer, M.D., and Richard P. Allen, Ph.D. Baltimore, Md., University Park Press, 1976, 233 pp., $8.50 (paper).*

Psychopathology and Child Development: Research and Treatment, *edited by Eric Schopler and Robert J. Reichler. New York, N.Y., Plenum Press, 1976, 381 pp., $22.50.*

Animal Models in Human Psychobiology, *edited by George Serban and Arthur Kling. New York, N.Y., Plenum Press, 1976, 289 pp., $22.50.*

Mental Health and Disease in Africa, with Special Reference to Africa South of the Sahara, *by Charles R. Swift, M.D., and Tolani Asuni, M.D., D.P.M. New York, N.Y., Churchill Livingstone (Longman), 1975, 239 pp., $9.50 (paper).*

Psychological Report Writing, *by Norman Tallent. Englewood Cliffs, N.J., Prentice-Hall, 1976, 252 pp., $12.95.*

Psychotherapy: The Hazardous Cure, *by Dorothy Tennov. Garden City, N.Y., Anchor Press/Doubleday, 1976, 324 pp., $3.50 (paper).*

Violence, *edited by Norman Tutt. London, England, Her Majesty's Stationery Office, 1976, 278 pp., no price listed (paper).*

The Visual World of the Child, *by Eliane Vurpillot. New York, N.Y., International Universities Press, 1976, 364 pp., no price listed.*

Your Child Learns Naturally, *by Silas L. Warner, M.D., and Edward B. Rosenberg. Garden City, N.Y., Doubleday & Co., 1976, 212 pp., $5.95.*

Obesity: Behavioral Approaches to Dietary Management, *edited by Ben J. Williams, Sander Martin, and John P. Foreyt. New York, N.Y., Brunner/Mazel, 1976, 210 pp., $13.50.*

Clinical Psychiatry, *by James H. Willis, M.B., D.P.M. Oxford, England, Blackwell Scientific Publications (Philadelphia, Pa., J.B. Lippincott Co., distributor), 1976, 462 pp., $32.00.*

Introducing WHO, *by the World Health Organization. Geneva, Switzerland, WHO (Albany, N.Y., Q Corp., distributor), 1976, 88 pp., 10 Swiss francs (paper).*

The Complete Family Nature Guide, *by Jean Reese Worthley. Garden City, N.Y., Doubleday & Co., 1976, 219 pp., $7.95.*

The Criminal Personality, Vol. I: A Profile for Change, *by Samuel Yochelson, Ph.D., M.D., and Stanton E. Samenow, Ph.D. New York, N.Y., Jason Aronson, 1976, 530 pp., no price listed.*

OFFICIAL ACTIONS

The American Board of Psychiatry and Neurology

The following successfully completed the Board examination given in Los Angeles, Calif., April 12–13, 1976.

PSYCHIATRY

Agallianos, Dennis D., M.D., Brattleboro, Vt.
Ainbinder, Martin I., M.D., Montclair, N.J.
Almy, Gary L., M.D., Great Lakes, Ill.
Alpern, Robert J., M.D., Atlanta, Ga.
Amdur, Mark A., M.D., Chicago, Ill.
Ames, David A., M.D., Beaver, W.Va.
Ammerman, Richard G., M.D., Reston, Va.
Apostle, Donald T., M.D., Santa Rosa, Calif.
Arnold, Joseph B., M.D., Eugene, Ore.
Atwell, Anthony E., M.D., Los Altos, Calif.
Auerbach, Daniel B., M.D., Los Angeles, Calif.
Austad, Carol C., M.D., Ann Arbor, Mich.
Azar, Kenneth A., M.D., Mt. Home AFB, Idaho

Backus, Joe T., M.D., Little Rock, Ark.
Balzarett, Joseph R., M.D., Annandale, Va.
Barber, Joan K., M.D., Bronxville, N.Y.
Barker, Thomas E., M.D., Fort Worth, Tex.
Bean, Margaret H., M.D., Cambridge, Mass.
Behrens, Manfred I., M.D., Berkeley, Calif.
Bell, Carl C., M.D., Evanston, Ill.
Berkowitz, Robert, M.D., Lakewood, N.J.
Berkson, Richard P., M.D., Visalia, Calif.
Bertschinger, Kurt A., M.D., Cleveland Heights, Ohio
Bhavsar, Raman N., M.D., Eloise, Mich.
Blum, Martin H., M.D., New York, N.Y.
Bolton, David R., M.D., Winnipeg, Man., Canada
Bonovitz, Jay S., M.D., Merion Station, Pa.
Borbely, Antal F., M.D., New York, N.Y.
Boyd, Bruce B., M.D., Chicago, Ill.
Bradley, Cecil A., M.D., San Mateo, Calif.
Braga, Wander de Carvalho, M.D., Delmar, N.Y.
Brickel, Neil I., M.D., Manchester, Mo.
Brohamer, Richard F., M.D., Ft. Lauderdale, Fla.
Brooks, Robert E., M.D., Los Angeles, Calif.
Brown, Ben M., M.D., Tucson, Ariz.
Bushi, Stephen T., M.D., Santa Monica, Calif.
Butzine, Paul R., M.D., Janesville, Wis.

Campbell, Dale W., M.D., Studio City, Calif.
Cantor, Sherwood R., M.D., Miami, Fla.
Caper, Robert A., M.D., Los Angeles, Calif.
Carlson, Bruce E., M.D., Philadelphia, Pa.
Chung, Sae Youn, M.D., Delmar, N.Y.
Chused, Judith F., M.D., Washington, D.C.
Collins, Gregory B., M.D., Shaker Heights, Ohio
Colodny, Dorothy, M.D., Pasadena, Calif.
Compton, Ariel S., M.D., Newport Beach, Calif.
Coplon, Fredric J., M.D., Lexington, Mass.
Corvino, Joseph M., M.D., Shaker Heights, Ohio
Courington, Frederick W., M.D., Gainesville, Fla.
Crain, Peter M., M.D., Torrance, Calif.
Crews, Eugene L., M.D., Pensacola, Fla.
Culver, Cathryn A., M.D., Topeka, Kans.
Curns, John R., M.D., Libertyville, Ill.
Curren, Franklin C., M.D., Cambridge, Mass.

Daly, Richard J., M.D., Marshfield, Wis.
Dang, Jagdish C., M.D., Fairlawn, N.J.
Daniels, Michael D., M.D., Wellesley, Mass.
D'Aquili, Eugene G., M.D., Berwyn, Pa.
Delli-Pizzi, Antonia E., M.D., Whiteston, N.Y.
Denaro, Anthony T., M.D., Avon, Conn.
Derbin, J. Philip, M.D., Burlingame, Calif.
DeVaul, Richard A., M.D., Houston, Tex.
Dhingra, Davinder H., M.D., Bedford, Tex.
Diamond, David B., M.D., Boulder Creek, Calif.
Donley, Patrick J., M.D., Kailua, Hawaii
Drell, Laurence M., M.D., Washington, D.C.
Duboff, Eugene A., M.D., Denver, Colo.
Durham, Roland P., Jr., M.D., Tarrytown, N.Y.

Ecker, Jonathan, M.D., Syracuse, N.Y.
Elkin, Bernice B., M.D., Casper, Wyo.
Ellsworth, George A., M.D., Washington, D.C.
Engelsing, Thomas M., M.D., Woodside, Calif.
Erfe, Jose A., M.D., Staunton, Va.
Essom, David M., M.D., Manlius, N.Y.
Evans, Yonynah S., M.D., Irvington, N.Y.

Faerstein, Saul J., M.D., Los Angeles, Calif.
Feirstein, Ira D., M.D., New York, N.Y.
Ferguson, Barbara B., M.D., Pacific Palisades, Calif.
Fields, Edward L., M.D., La Jolla, Calif.
Finkel, Sanford I., M.D., Wilmette, Ill.
Foster, Tiah Ann, M.D., Santa Clara, Calif.
Fox, Herbert A., M.D., New York, N.Y.
Frances, Richard J., M.D., Bremerton, Wash.
Frank, Ross D., M.D., Greenwich, Conn.
Frank, Sheldon M., M.D., Scarsdale, N.Y.
Frankel, Mark H., M.D., Cleveland, Ohio
French, Perrin L., M.D., Palo Alto, Calif.
Friedman, Mathew J., M.D., White River Junction, Vt.
Friedman, Stephen J., M.D., Marina Del Rey, Calif.
Frost, Nicholas R., M.D., Del Mar, Calif.
Fryer, David G., M.D., Mercier Island, Wash.

Gabriel, Rosalinda V., M.D., Trenton, N.J.
Gale, Melvin S., M.D., Cincinnati, Ohio
Gallagher, J. Richard, M.D., Aurora, Ill.
Gardner, Alan M., M.D., Biloxi, Miss.
Garwacki, Janusz J., M.D., Austin, Tex.
Gault, Henry J., M.D., Cypress, Calif.
Gellar, Richard, M.D., Topeka, Kans.
Gelpi, Jose A., M.D., York, Pa.
Gerber, Carl J., M.D., Tacoma, Wash.
Gerson, Stephen N., M.D., Newton Center, Mass.
Ghahramani, Mahmood, M.D., Philadelphia, Pa.
Gillingham, Paul M., M.D., Cincinnati, Ohio
Glass, Joel B., M.D., Philadelphia, Pa.
Goettsche, Roger L., M.D., Clinton, Conn.
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Goldmuntz, Barry M., M.D., Colorado Springs, Colo.
Goldstein, Robert, M.D., Tonawanda, N.Y.
Goodman, Janet R., M.D., New York, N.Y.
Gottlieb, Richard M., M.D., New York, N.Y.
Gottwik, Gerda C., M.D., Newton Center, Mass.
Gough, James, M.D., Gander, Nfld., Canada
Gould, Kenneth S., M.D., Princeton, N.J.
Graham, Polly A., M.D., Morristown, N.J.
Graupner, Kenneth C., M.D., Beaver Dam, Wis.
Greenspan, Arthur, M.D., New York, N.Y.
Griffin, Darrel A., M.D., Webster, Tex.
Groble, Robert E., M.D., Jacksonville, Fla.
Gross, Rudolph A., M.D., White Plains, N.Y.
Grove, Vernon E., Jr., M.D., Austin, Tex.
Gruberg, Kermit H., M.D., Oakland, Calif.
Gureasko, Michael A., M.D., Cincinnati, Ohio
Gutterman, Gary S., M.D., Denver, Colo.

Hamburger, Charles A., M.D., Los Angeles, Calif.
Hamilton, Norma B., M.D., Miami, Fla.
Harding, Richard K., M.D., Bonita, Calif.
Harrington, Ronald R., M.D., San Diego, Calif.
Harris, Leonard, M.D., Cincinnati, Ohio
Hedlund, Douglas A., M.D., Timonium, Md.
Henderson, Robin G., M.D., Brooklyn, N.Y.
Herbert, Chesley C., M.D., San Francisco, Calif.
Herman, Ronald S., M.D., Northridge, Calif.
Herring, John A., M.D., Vilanova, Pa.
Herzog, David A., M.D., West Newton, Mass.
High, James R., M.D., Pacific Palisades, Calif.
Hillenbrand, Charles R., M.D., Villa Park, Ill.
Hirsch, Michael A., M.D., Davis, Calif.
Hlusko, George P., Jr., M.D., Charleston, W.Va.
Hollar, Milton C., M.D., New Rochelle, N.Y.
Horne, William T., M.D., Mill Valley, Calif.
Huebner, Hans F., M.D., New York, N.Y.
Hughes, Linda R.L., M.D., Dallas, Tex.
Humphrey, Frederick J. II, D.O., Lebanon, Pa.
Hunter, William B. III, M.D., Chapel Hill, N.C.

Irvine, Florence C., M.D., San Francisco, Calif.

Janik, Andrew, M.D., Orinda, Calif.
Johnson, Michael L., M.D., Bloomington, Ind.
Johnson, Ray L., M.D., Atlanta, Ga.
Joseph, Brian S., M.D., Waban, Mass.

Kaleel, M. Nawaz, M.D., Sacramento, Calif.
Kang, Sang C., M.D., Brooklyn, N.Y.
Kantor, Shepard J., M.D., New York, N.Y.
Kaufman-Diamond, Sharon, M.D., Los Angeles, Calif.
Kavey, Neil B., M.D., Chappaqua, N.Y.
Kaye, Robert A., M.D., San Mateo, Calif.
Kearns, Norbert W., Jr., M.D., San Antonio, Tex.
Keller, Timothy W., M.D., Los Angeles, Calif.
Kennelly, Daniel J., M.D., Sioux Falls, S.D.
Kerbershian, Jacob, M.D., Xenia, Ohio
Kersting, John W., M.D., Athens, Pa.
King, Richard L., M.D., New York, N.Y.
Kishner, Ira A., M.D., Great Neck, N.Y.
Klass, Joel V., M.D., New York, N.Y.
Klyman, Cassandra M., M.D., Bloomfield Hills, Mich.
Kolb, Jonathan E., M.D., Boston, Mass.
Kornhaber, Eugene M., M.D., Chappaqua, N.Y.
Krick, Warren J., M.D., Los Altos, Calif.
Kunzman, E. Eugene, M.D., San Marino, Calif.

Lable, Ira, M.D., Framingham, Mass.
Ladov, Norman, M.D., Augusta, Ga.
Lapes, George A., M.D., York, Pa.
Larson, James L., M.D., Orange Park, Fla.
Laughren, Thomas P., M.D., Providence, R.I.
Lauro, Sylvia D.S., M.D., Plainville, Mass.
Leabman, Daniel L., D.O., New York, N.Y.
LeFevre, Philip J., M.D., Springfield, Mo.
Lenz, William J., Jr., M.D., Westville, N.J.
Lerro, Furey A., M.D., Freehold, N.J.
Levin, Fred M., M.D., Chicago, Ill.
Levy, Ellis H., M.D., Allentown, Pa.
Levy, Michael T., M.D., New York, N.Y.
Levy, Steven T., M.D., Atlanta, Ga.
Liebowitz, Jerome H., M.D., Emerson, N.J.
Lind, Myron, M.D., Van Nuys, Calif.
Liskow, Barry, M.D., Iowa City, Iowa
Lloyd, Richard A., M.D., Merced, Calif.
Locke, Murray S., M.D., Minneapolis, Minn.
Looney, John G., M.D., San Diego, Calif.
Lourie, Ira S., M.D., Rockville, Md.
Luisada, Paul V., M.D., Alexandria, Va.
Lustig, Herbert S., M.D., Haverford, Pa.

McCandless, Jaquelyn B., M.D., Calabasus, Calif.
McCurdy, James R., M.D., San Rafael, Calif.
McDanal, Clarence E., Jr., M.D., Honolulu, Hawaii
McGuire, James P., M.D., Barrington, R.I.
McLarty, William T., Jr., M.D., Atlanta, Ga.
Mahnke, Mark W., M.D., Cambridge, Mass.
Major, Leslie F., M.D., Chevy Chase, Md.
Mansheim, Paul A., M.D., Philadelphia, Pa.
Martin, Lawrence M., M.D., Birmingham, Ala.
Martinez, Cervando, Jr., M.D., San Antonio, Tex.
Mathews, Marvin G., M.D., Honolulu, Hawaii
Matthews, Kenneth L., M.D., San Antonio, Tex.
Mattox, James D., Jr., M.D., Winston-Salem, N.C.
Mayer, Robert G., M.D., Boston, Mass.
Mayerson, Donald J., M.D., New York, N.Y.
Miller, Robert H., M.D., Norristown, Pa.
Mirza, Mahmud-Ur-Rehman, M.D., Syracuse, N.Y.
Mollin, Joel, M.D., Brooklyn, N.Y.
Moore, Julia F., M.D., Pacific Palisades, Calif.
Moreschi, Patricia R., M.D., Wayne, Pa.
Morrison, S. David, M.D., Birmingham, Ala.

Nelson, Bobby W., M.D., Richmond, Va.
Nichols, David M., M.D., Atlanta, Ga.
Nielsen, Cantril, M.D., Salt Lake City, Utah
Notes, Richard D., M.D., Boca Raton, Fla.
Noyes, Tom E., M.D., Fresno, Calif.

Oesterheld, Jessica R., M.D., Waban, Mass.
O'Grady, Arthur S., M.D., Brookline, Mass.
Oliver, Richard W., M.D., Chicago, Ill.
Onkin, Ronald H., M.D., Los Angeles, Calif.
Oskin, Hilbert E., M.D., Murraysville, Pa.

Palmer, Richard R., M.D., Bethesda, Md.
Palmieri, Ronald J., M.D., Ft. Leonard Wood, Mo.
Panteledes, George, M.D., Peabody, Mass.
Partridge, Robert A., M.D., Drexel Hill, Pa.
Passmore, Ronald C., M.D., Tulsa, Okla.

Paul, Michael Ian, M.D., Beverly Hills, Calif.
Pederson, William M., M.D., Dallas, Tex.
Peles, Uri P., M.D., Great Neck, N.Y.
Pfeffer, Bruce P., M.D., Rockville, Md.
Pffefferbaum, Adolf, M.D., Los Altos Hills, Calif.
Pilosi, Robert N., M.D., Great Neck, N.Y.
Pineda, Lourdes C., M.D., St. Louis, Mo.
Piotrowski, Kenneth W., M.D., Sarasota, Fla.
Poitrast, Bruce J., M.D., Newport News, Va.
Popkin, Michael K., M.D., Golden Valley, Minn.
Porter, Kenneth, M.D., Bronx, N.Y.
Procci, Warren R., M.D., Los Angeles, Calif.
Puig-Antich, Joaquim, M.D., Bronx, N.Y.

Quint, Alan S., M.D., Kalispell, Mont.

Rabin, Barry E., M.D., Elmhurst, Ill.
Ramirez, Luis F., M.D., Brecksville, Ohio
Ramsey, T. Alan, M.D., Philadelphia, Pa.
Ratnam, Dasari V., M.D., Kansas City, Mo.
Ray, Albert L., M.D., Hialeah, Fla.
Reddy, Kamalesh K., M.D., Leawood, Kans.
Renik, Owen D., M.D., San Francisco, Calif.
Reynolds, Brian J., M.D., Vienna, Va.
Rich, Harvey L., M.D., Washington, D.C.
Rogers, Malcolm P., M.D., Brookline, Mass.
Rogerson, Kent E., M.D., Stockton, Calif.
Rose, Richard S., M.D., Mission Viego, Calif.
Rosenthal, Miriam B., M.D., Cleveland Heights, Ohio
Rosenthal, Randall, M.D., Clayton, Mo.
Roskos, S. Richard, M.D., Topeka, Kans.
Rothschild, Walter, M.D., Encino, Calif.
Rucker, Morton S., M.D., Dover, N.H.

Sack, Peter G., M.D., Riverdale, N.Y.
Sakamoto, Frederick A., M.D., APO N.Y.
Salama, Sheila R., M.D., New York, N.Y.
Sall, David L., M.D., Jacksonville, Fla.
Saltzman, Peter R., M.D., Natick, Mass.
Saporito, Charles Joseph, M.D., Plantation, Fla.
Sashin, Jerome I., M.D., Brookline, Mass.
Schalker, David E., M.D., St. Paul, Minn.
Scharf, Robert D., M.D., New York, N.Y.
Schell, Scott T., M.D., Los Angeles, Calif.
Schmiege, Gustav R., Jr., M.D., Hadonfield, N.J.
Schoenfeld, Melvyn, M.D., Brooklyn, N.Y.
Scholten, Dirk J., M.D., Holland, Mich.
Schreiber, Kenneth A., M.D., New York, N.Y.
Schreter, Robert K., M.D., Ft. Sill, Okla.
Schrier, Herbert A., M.D., Cambridge, Mass.
Schwartz, Andrew, M.D., Arlington, Va.
Schwartz, Earl D., M.D., New York, N.Y.
Sewell, H.H., M.D., Carmichael, Calif.
Shafa, Mehdi G., M.D., Flossmoor, Ill.
Shah, Manoj R., M.D., Flushing, N.Y.
Sherman, Miriam, M.D., Great Neck, N.Y.
Short, Michael J., M.D., Bloomfield Hills, Mich.
Shultz, James M., M.D., Austin, Tex.
Sidle, Allan C., M.D., Palo Alto, Calif.
Simon, Jack W., M.D., Palo Alto, Calif.
Skodnek, Kenneth B., M.D., Dix Hills, N.Y.
Slack, Robert G., M.D., Spokane, Wash.
Sloan, Ira H., M.D., Highland Park, Ill.
Soloff, Paul H., M.D., San Antonio, Tex.
Stambler, Morris J., M.D., Watertown, Mass.
Stanley, Ernest J., M.D., Newport Beach, Calif.
Stempler, Allan I., M.D., Great Neck, N.Y.
Stern, Darryl R., M.D., Scotsdale, Ariz.
Stern, Robert, M.D., Woodbridge, Conn.
Stile, Sabato A., M.D., Murrysville, Pa.
Stone, Diane L., M.D., New York, N.Y.
Swearingen, Charles W., M.D., Cambridge, Mass.
Sweet, John H., M.D., St. Louis, Mo.
Swerdlow, Bernard, M.D., Hialeah, Fla.
Syphers, Grant, M.D., Pleasanton, Calif.

Tardiff, Kenneth, M.D., Stony Brook, N.Y.
Taub-Katz, Julia E., M.D., New York, N.Y.
Terry, William T., M.D., APO N.Y.
Thieman, Thomas G., M.D., Visalia, Calif.
Thomas, Aelamkalam C., M.D., Dix Hills, N.Y.
Threlkeld, William A., M.D., Valdosta, Ga.
Torchin, Robert P., M.D., Newton, Mass.
Turner, Ann, M.D., Menlo Park, Calif.

Vaisanen, Raimo A., M.D., Norwich, Conn.
VanDevere, Chris A., M.D., Akron, Ohio
Vaquer, Frederick, M.D., Beverly Hills, Calif.
Vaughan, Tom B., Jr., M.D., Birmingham, Ala.
Von Greiff, Hermann A., M.D., New Rochelle, N.Y.

Wagner, Seymour, M.D., Narberth, Pa.
Waldman, Roy D., M.D., Manlius, N.Y.
Walls, Philip D., M.D., Temple Hills, Md.
Wasserman, James M., M.D., Richmond, Ind.
Wayland, Joan T., M.D., Nampa, Idaho
Weissman, Stephen M., M.D., Washington, D.C.
Whaley, Marc A., M.D., Westwood, Mass.
Whipple, Frederick L., M.D., Sacramento, Calif.
Widzer, Martin E., M.D., Marina Del Rey, Calif.
Willett, Gregory, M.D., Los Angeles, Calif.
Williams, Samuel D., M.D., Birmingham, Ala.
Wilson, Roger M., M.D., Bar Harbor, Maine
Wollack, C. Harold, M.D., San Jose, Calif.
Wortman, Richard N., M.D., New York, N.Y.

Yokell, David, M.D., New York, N.Y.
Young, Laurens D., M.D., Charleston, S.C.
Youngs, David D., M.D., Falmouth, Maine

NEUROLOGY

Atkinson, Ruth A., M.D., Albuquerque, N.M.

Bernstein, Allan L., M.D., Hayward, Calif.
Blasberg, Ronald G., M.D., Washington, D.C.
Blazina, Vay John, M.D., Chevy Chase, Md.
Boothby, John A., M.D., Falmouth, Maine
Brand, Michael M., M.D., Clifton, N.J.

Calmes, Robert L., M.D., Fresno, Calif.
Capozzoli, Nicholas A., M.D., Severna Park, Md.
Chen, Tzeng-Chih, M.D., Evansville, Ind.
Cohan, Stanley L., M.D., Bethesda, Md.
Corrie, William S., M.D., Toledo, Ohio
Coyle, John M., M.D., San Luis Obispo, Calif.
Cruz, Marcelo E., M.D., Quito, Ecuador

DeSousa, Jose U., M.D., Dearborn, Mich.
DeVere, Ronald, M.D., Houston, Tex.

Finelli, Pasquale F., M.D., Providence, R.I.

Gomori, Andrew J., M.D., Winnipeg, Man., Canada
Griffin, John W., M.D., Columbia, Md.

Hall, Colin D., M.D., Chapel Hill, N.C.
Hughes, John A., M.D., Farmington Hills, Mich.

Jabbari, Bahman, M.D., New Orleans, La.

Koski, Carol Lee, M.D., Boston, Mass.

Krieger, Michael P., M.D., Mansfield, Ohio

Levin, Victor Alan, M.D., Mill Valley, Calif.
Likosky, William H., M.D., Saratoga, Calif.

Margolin, Michael M., M.D., Moorestown, N.J.
Medina, Jose L., M.D., River Forest, Ill.

O'Sullivan, John A., M.D., Rochester, N.Y.

Parker, James M., M.D., Columbus, Ohio

Sharma, Chandra M., M.D., New York, N.Y.
Smith, Allen O., M.D., St. Petersburg, Fla.

Toran, Richard E., M.D., Needham, Mass.

Zee, David Samuel, M.D., Columbia, Md.

Commission on Certification in Administrative Psychiatry

The following successfully completed the Commission's examination given in Miami, Fla., May 9, 1976, and are now certified Mental Health Administrators.

Chess, Robert H., M.D., Cincinnati, Ohio
Daly, Robert M., M.D., New York, N.Y.
Davis, Dave M., M.D., Atlanta, Ga.
deVito, Robert A., M.D., Downers Grove, Ill.
DiBella, Geoffrey A.W., M.D., New York, N.Y.
Jafri, Mokarram H., M.D., Apalachin, N.Y.
Kellermann, Sara L., M.D., Riverdale, N.Y.
Nadel, William R., M.D., Hastings-on-Hudson, N.Y.
Parwatikar, Sadashiv D., M.D., Olivette, Mo.
Pati, Prasanna K., M.D., Salem, Ore.
Shah, Girish V., M.D., Pine City, N.Y.
Suckow, George R., M.D., Wilsonville, Ore.
Sussman, Robert B., M.D., Scarsdale, N.Y.
Yost, Henry F., M.D., Augusta, Ga.

In schizophrenia...

Because efficacy and side effects are a single consideration



Loxitane®
LOXAPINE SUCCINATE
Lederle

The record speaks louder than words

See LOXITANE prescribing information on last page of this advertisement for contraindications, warnings and precautions and for more detailed information concerning side effects.

From the record:

LOXITANE substan symptoms of schizo

DEPRESSION
Somatic Concern
Anxiety
Guilt Feelings
Depressive Mood



ACUTE SCHIZOPHRENIC PATIENTS
(Treated 3 to 6 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE
TRIFLUOPERAZINE
CHLORPROMAZINE

	Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
LOXITANE® LOXAPINE SUCCINATE	57	41	53	54	59
TRIFLUOPERAZINE	37	21			
CHLORPROMAZINE			42	52	36

CHRONIC SCHIZOPHRENIC PATIENTS
(Treated 8 to 12 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE
TRIFLUOPERAZINE
CHLORPROMAZINE

	Arik, M (50 patients)	Galiant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
LOXITANE® LOXAPINE SUCCINATE	36	27	9	60	28	-6
TRIFLUOPERAZINE	44	25	-3	48		
CHLORPROMAZINE					-64	0

tially reduces the phrenia

Results of 11 controlled studies[1] evaluated by the Brief Psychiatric Rating Scale to determine the efficacy of LOXITANE® Loxapine Succinate by comparing it with trifluoperazine and chlorpromazine. They do not imply a claim of differential effectiveness or superiority. However, certain trends, not statistically significant, suggest superiority. These require further tests for confirmation.

1. Data on file, Clinical Research Department, Lederle Laboratories.

THOUGHT DISORDER

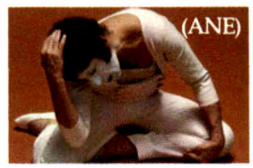
Conceptual Disorganization
Grandiosity
Suspiciousness
Hallucinatory Behavior
Unusual Thought Content



Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
68	52	54	79	52
40	50			
		64	67	37

ANERGIA

Emotional Withdrawal
Mannerisms and Posturing
Motor Retardation
Blunted Affect



Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
53	43	13	43	52
33	33			
		43	26	32

EXCITEMENT – DISORIENTATION

Excitement
Disorientation



Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
71	61	101	92	46
27	40			
		82	68	31

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
20	49	6	58	19	14
8	29	-3	36		
				9	25

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
9	15	-1	60	19	23
14	27	-12	42		
				16	21

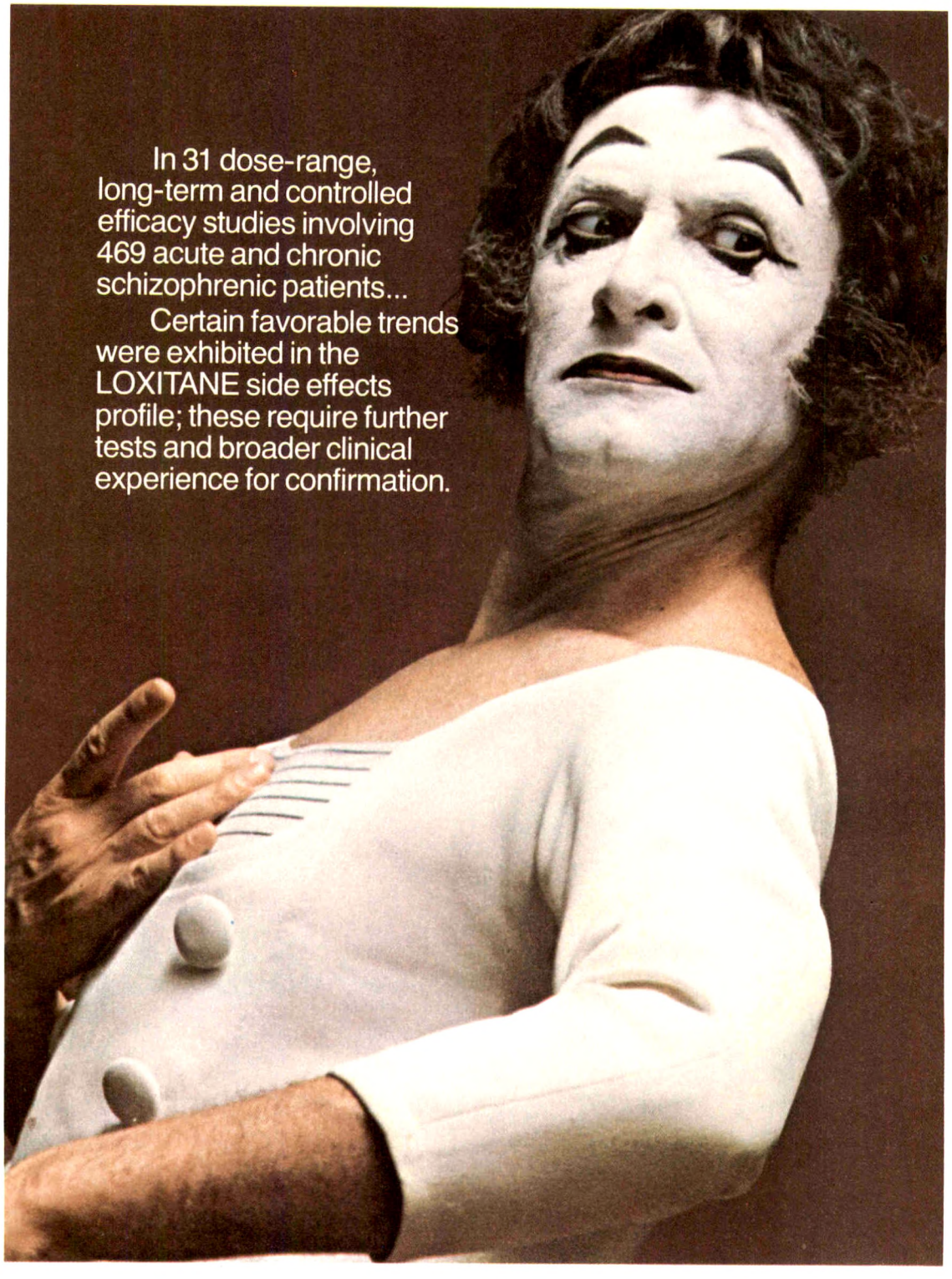
Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
17	26	22	–	49	3
18	44	-24	–		
				42	2



Loxitane®
LOXAPINE SUCCINATE
Lederle

From the record:

LOXITANE has favorable trends



In 31 dose-range, long-term and controlled efficacy studies involving 469 acute and chronic schizophrenic patients...

Certain favorable trends were exhibited in the LOXITANE side effects profile; these require further tests and broader clinical experience for confirmation.

exhibited certain in side effects profile

While cardiac arrest, blood dyscrasias and renal toxicity have been reported with other antipsychotic agents, they have not been seen with LOXITANE. Hepatotoxicity manifested by jaundice or biliary stasis has not been observed. Transient liver enzyme changes, however, have been reported, but it has not been determined whether they are related to LOXITANE administration.

Although a few cases of changes in ECG have been reported, a causal relationship between this reaction and LOXITANE has not been established. Clinical experience with LOXITANE has not demonstrated ocular toxicity, however, the possibility of its occurrence cannot be ruled out at this time. Of the various endocrine abnormalities, only galactorrhea has been noted with LOXITANE, and only in rare instances.

Manifestations of adverse effects on the central nervous system other than extrapyramidal symptoms have been encountered infrequently, and drowsiness, when it occurs, is usually mild and subsides with continued therapy. Skin rashes of uncertain etiology have been observed in a few patients during the hot summer months; therefore the possibility of phototoxicity and/or photosensitivity cannot be excluded. Like certain other antipsychotic agents, LOXITANE lowers the convulsive threshold and should be used with extreme caution in patients with a history of convulsive disorders.

In general, LOXITANE presents a profile of extrapyramidal side effects similar to that of other agents used in the treatment of schizophrenia.

Cardiovascular effects such as hypotension, hypertension, light-headedness and syncope have been reported. Anticholinergic effects seen with LOXITANE include dry mouth, nasal congestion, constipation and blurred vision.

See LOXITANE prescribing information on next page for contraindications, warnings and precautions and for more detailed information concerning side effects.

A range of dosage strengths to suit the patient's individual needs

Supplied

Capsules

10 mg Green and Yellow

25 mg Green Two Tone

50 mg Green and Blue

Recommended Daily Dosage

Initial Dosage	MILD 10 mg b.i.d.	MODERATE 10 mg t.i.d. or q.i.d.	SEVERE 25 mg b.i.d.
First 7 to 10 Days	Increase dosage until psychotic symptoms are controlled. Dosage should not exceed 250 mg/day. Usual dosage during titration: 50 to 150 mg/day.		
Maintenance Dosage	Adjust to lowest effective level. Usual maintenance dosage: 60 to 100 mg/day. Many patients are controlled with dosages as low as 20 to 60 mg/day.		



Loxitane®
LOXAPINE SUCCINATE
Lederle

Because efficacy and side effects are a single consideration

Loxitane®
LOXAPINE Lederle SUCCINATE

Because efficacy and side effects are a single consideration

FOR ORAL USE

PRODUCT INFORMATION

DESCRIPTION

LOXITANE *loxapine*, a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2 - chloro - 11 - (4 - methyl - 1 - piperazinyl) dibenz [b,f] [1,4] oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg of loxapine succinate is equivalent to 1 mg of loxapine.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE *loxapine succinate* is indicated for the manifestations of schizophrenia.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

Usage in Pregnancy: Safe use of LOXITANE *loxapine succinate* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from midpregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients



should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE loxapine succinate should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects: Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE *loxapine succinate* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, light-headedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

DOSAGE AND ADMINISTRATION

LOXITANE *loxapine succinate* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

HOW SUPPLIED

LOXITANE *loxapine succinate* is supplied in the following base equivalent strengths:

CAPSULES Hard Shell Printed "Lederle"

10 mg—Green and Yellow; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5360

25 mg—Green Two Tone; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5361

50 mg—Green and Blue; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5362

REV. 3/75

Because schizophrenia is symptoms

LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York 10965

796-6

A Survey of Academic Resources in Psychiatric Residency Training

Author: Lee Gurel, Ph.D.

This survey provides information and analyzes various characteristics of psychiatric residency training programs: training institutions, faculty and trainees.

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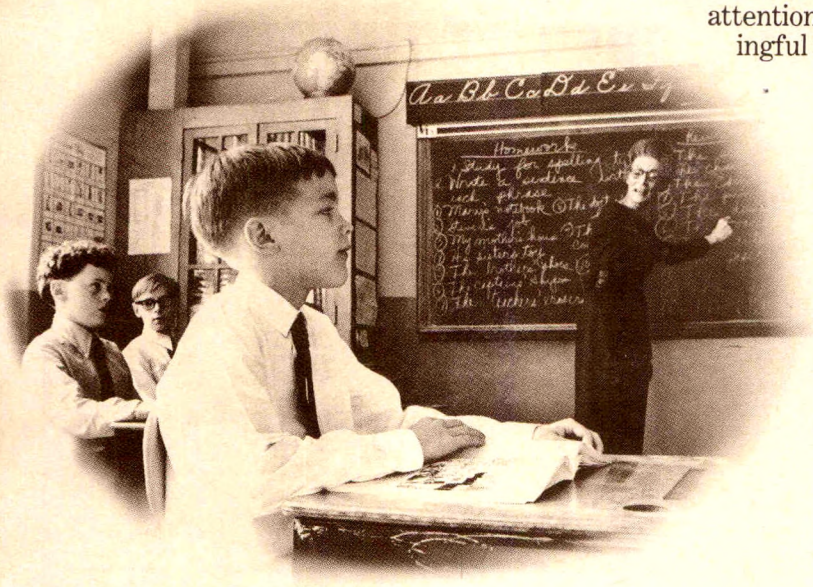
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Tested by time and experience i

1962

"...a considerable decrease of hyperactivity...."[1]
Knobel, 1962



Over a decade of controlled studies and clinical experience has shown the effectiveness of Ritalin in reducing the hyperactivity,[1-3] distractibility,[1,4,5] and disorganized behavior[1-8] in the MBD child.

By lessening the effects of motor and attentional disorders, Ritalin can help the MBD child to better focus his attention on meaningful stimuli and thus can often improve cognition and promote learning.[6,9]

And side effects – insomnia a appetite loss – with Ritalin have occurred less frequently than witl dextroamphetamine.[10,11]

Indeed, Ritalin is currently a drug of choice in many MBD situa tions,[10,12] and can prove to be an im portant element in many complete remedial programs for MBD.

Therapy with Ritalin should l undertaken only after a medical diagnosis of MBD has been made. Drug treatment is not indicated fo all children with MBD.

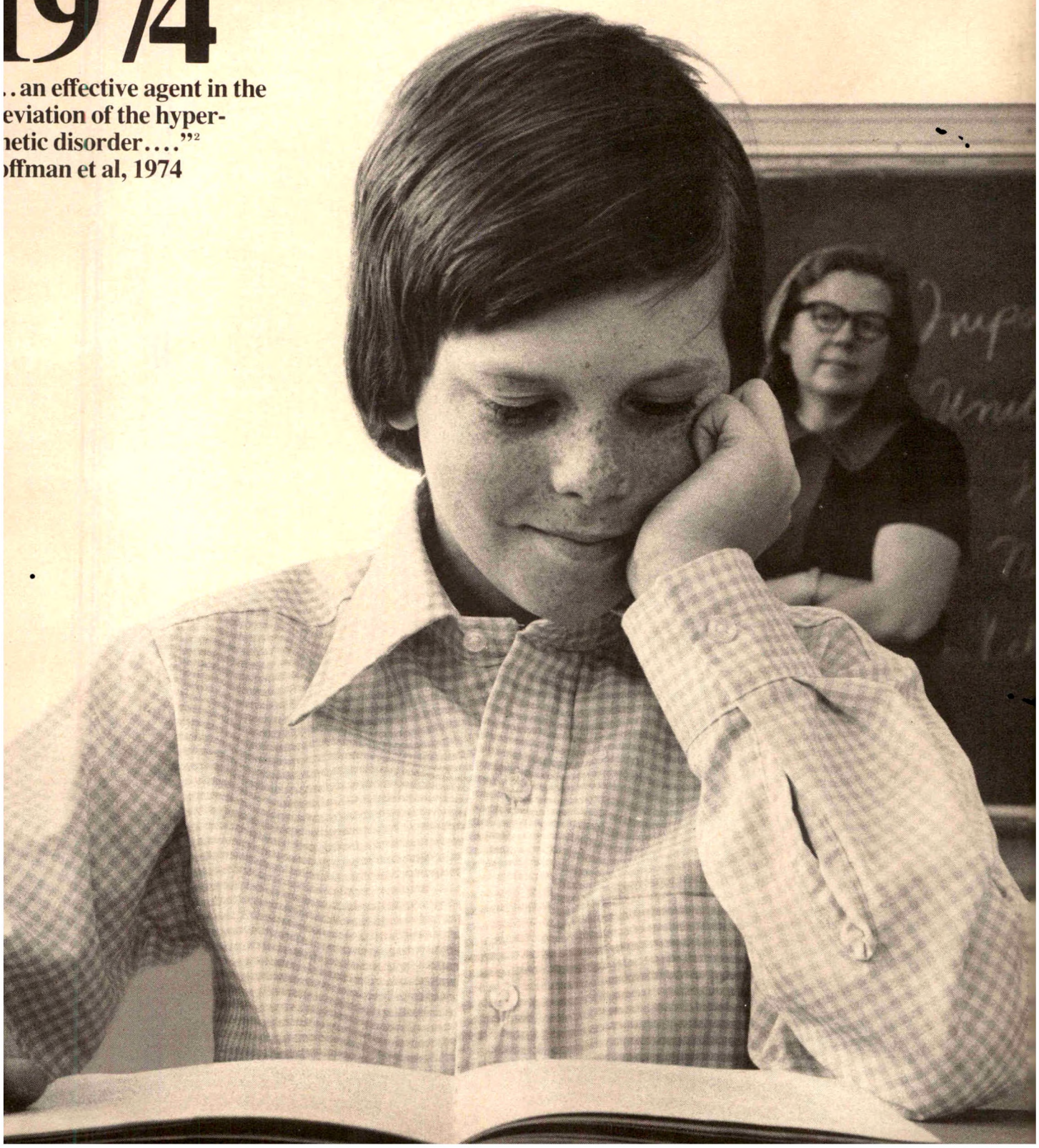
Dosage should be periodically interrupted. Often, these interrup tions reveal some "stabilization" in the child's behavior even without medication, permitting a reductior in dosage and eventual discontinuance of drug therapy.

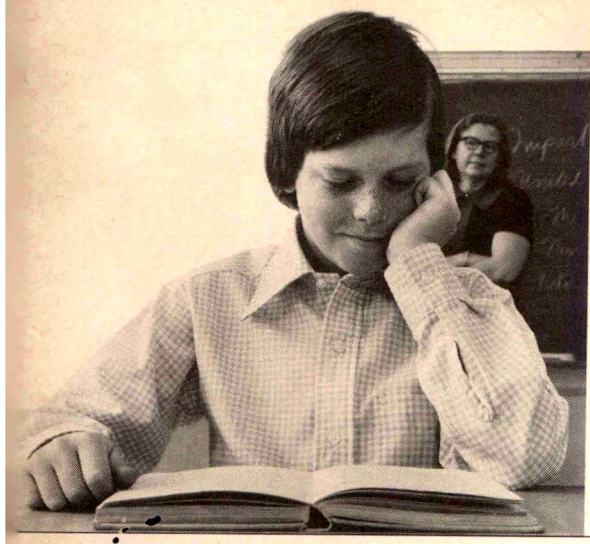
Ritalin®
(methylphenidate)
Only when medication is indicated

the treatment of MBD

1974

...an effective agent in the
eviation of the hyper-
netic disorder...."[2]
offman et al, 1974





Ritalin®
(methylphenidate)
Only when medication is indicated

Ritalin® hydrochloride ℂ
(methylphenidate hydrochloride)

TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.

Characteristics commonly reported include: chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; minor neurological signs and abnormal EEG. Learning may or may not be impaired. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis. Appropriate educational placement is essential and psychosocial intervention is generally necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin should not be used in children under six years, since safety and efficacy in this age group have not been established.

Sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available. Although a causal relationship has not been established, suppression of growth (*ie*, weight gain and/or height) has been reported with long-term use of stimulants in children. Therefore, children requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary.

Periodic CBC, differential, and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported. Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: leukopenia and/or anemia; a few instances of scalp hair loss.

In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.

Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Accu-pak® blister units of 100

Tablets, 5 mg (pale yellow); bottles of 100, 500, and 1000.

Consult complete product literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

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The directory contains two major sections: the ALPHABETIC SECTION, containing the name, address, membership class, year joined and board certification for each member; and the GEOGRAPHIC SECTION, containing name, membership class, and board for each member arranged as follows: United States, alphabetically by state and city; Canada, alphabetically by province and city; and Foreign, alphabetically by country and city.

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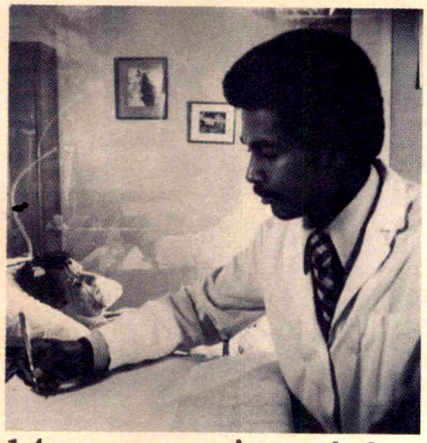
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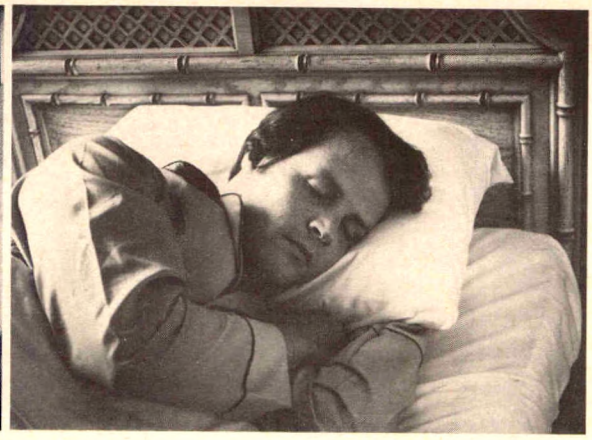
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From the sleep research laboratory:

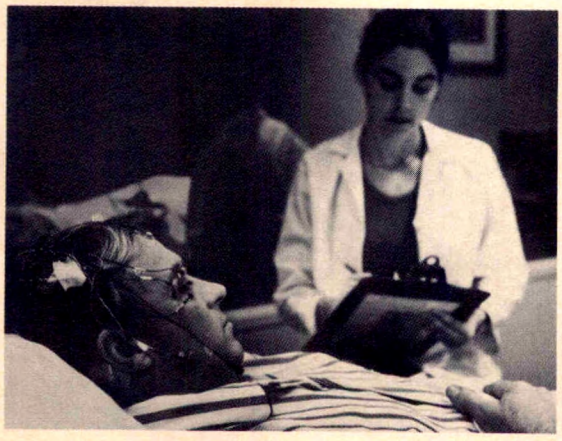
Dalmane® (flurazepam HCl) proved the most effective hypnotic over 14 nights...[1]





14 consecutive nights:
3 in sleep laboratory, 8 at home,
3 in sleep laboratory

...and now, the only one proved effective over 28 nights.[2,3]



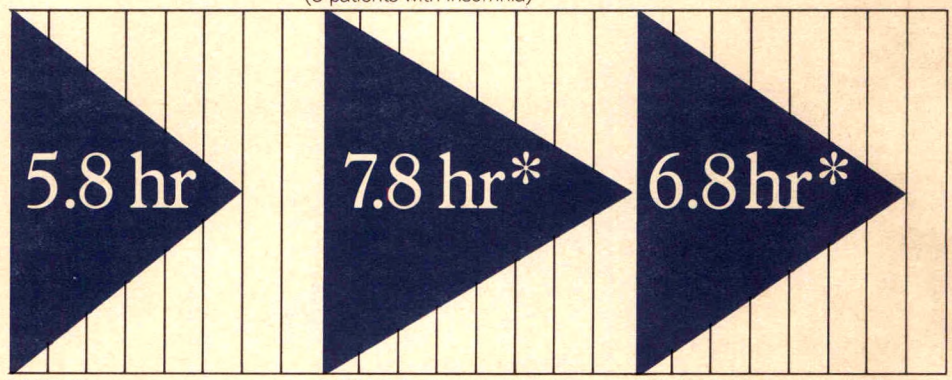


28 consecutive nights:
3 in sleep laboratory, 7 at home,
4 in sleep laboratory, 10 at home,
4 in sleep laboratory[3]

For those patients who need it, Dalmane (flurazepam HCl) alone provides continued effectiveness[2,3]

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But for those patients whose insomnia is a chronic problem, the continued effectiveness of Dalmane is a decided benefit. Even at the end of a 28-night medication period, patients with chronic insomnia were falling asleep faster, spending less time awake during the night, and sleeping substantially longer on Dalmane 30 mg *h.s.* than on baseline placebo nights (average results). This effectiveness was proved[2] and confirmed[3] in two independent sleep research studies using a new 47-night protocol. When similarly evaluated, pentobarbital was ineffective at the end of two weeks.[2]

TOTAL SLEEP TIME (MEAN)[3]
(5 patients with insomnia)



*Significantly increased over baseline placebo ($P < .05$).

In previous studies[1], chloral hydrate and glutethimide lost most or all effectiveness

In fact, continued effectiveness for both inducing and maintaining sleep over 14 consecutive nights[1] has long been an exclusive benefit of Dalmane. No other available sleep agent, including chloral hydrate or glutethimide,[1] has been able to demonstrate such effectiveness in the sleep research laboratory.

The safety record of Dalmane (flurazepam HCl) is well established

Dalmane is relatively safe and well tolerated. Prolonged administration is not generally necessary, but if used repeatedly, periodic blood counts and liver and kidney function tests should be performed.

Dalmane®
(flurazepam HCl)

ROCHE

relatively safe... no need to increase dosage.

Please see following page for a summary of complete product information.

1,5,7,14,28 nights... as needed, the effectiveness of **Dalmane**® one *h.s.* (flurazepam HCl) Ⓒ IV meets the challenge of insomnia

One 30-mg capsule *h.s.*—usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

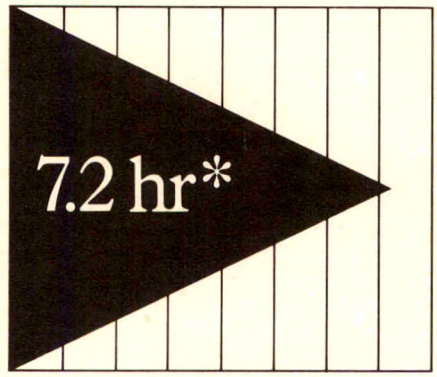
■ Patients fall asleep rapidly, sleep longer on a single *h.s.* dose.

■ Nighttime awakenings and time spent awake are reduced

■ Effectiveness maintained without dosage increase from night to night

■ Patients generally awaken refreshed; morning "hangover" is infrequent

TOTAL SLEEP TIME (OVERALL MEAN)[3]
(5 patients with insomnia)



DALMANE (flurazepam HCl)
NIGHTS 1-3, 12-14, 26-28

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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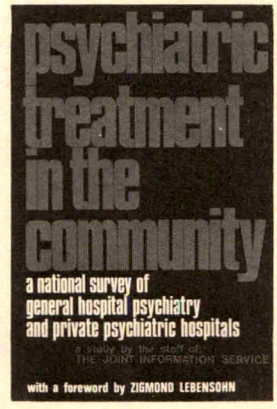
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For more than a decade the general hospital psychiatric unit has been the principal locus of inpatient treatment. This latest Joint Information Service national survey brings up to date its earlier—and the original—study of this important component of the psychiatric scene. It reveals that the remarkable rate of growth held up, showing an increase of 50 percent in the number of units between 1963 and 1971, and an increase of 46 percent in the number of admissions. And it verifies that general hospital psychiatry has become increasingly comprehensive, with an impressively high level of outpatient service, emergency service, and even consultation to community agencies. Indeed, the general hospital accounts for several times as much service and activity as the widely heralded federally supported community mental health center.

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in clinically significant depression...

penetrating the symptom barrier to productive psychotherapy

symptoms often interfere with therapy

In clinically significant depression, the patient often becomes barricaded behind his own symptoms during psychotherapy. Because these symptoms can be so sharply defined and somatic in expression, he may reject the fact that they are psychic in origin. Sleep disturbance, gastrointestinal complaints, anorexia, chronic fatigue, and other psychosomatic symptoms may so preoccupy—or overwhelm—the depressed patient that truly productive therapeutic sessions are difficult to achieve. Instead of being able to concentrate on the core emotional problems of the depression itself, he may for example go on at length about how broken his sleep is or keep reiterating (while the therapeutic hour slips by) how physically miserable he feels.

ELAVIL®
(AMITRIPTYLINE HCl, MSD)
to help penetrate the symptom barrier in depression requiring medication

ELAVIL, a highly effective tricyclic antidepressant, will often alleviate these symptoms. With the help of ELAVIL, sleep disturbance—so common in clinically depressed patients and often the symptom that distresses them most—as



well as other "barrier symptoms" may be lessened to the point where they no longer come between you and the patient.

psychotherapy takes direction

As these preoccupying complaints are lifted, psychotherapy sessions can become more productive. Patients are enabled to respond more fruitfully during therapeutic hours and to resume or pursue more efficiently the necessary activities in their personal lives.

meeting therapeutic goals

And as the antidepressant activity of ELAVIL (Amitriptyline HCl, MSD) takes hold, it helps relieve the depressive condition itself. Sometimes only a minimum of actual psychotherapy is required. The patient may experience a more rapid recovery—while you conserve valuable time.

Prescribe ELAVIL then, to help lighten the patient's burden in depression—and yours in its management.

ELAVIL should not be used during the acute recovery phase following myocardial infarction; in patients hypersensitive to it; in those who have received an MAOI within two weeks; or in children under 12. Patients with cardiovascular disorders should be watched closely. Its safe use during pregnancy and lactation has not been established. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

TABLETS: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg
INJECTION: 10 mg per ml

ELAVIL®
(AMITRIPTYLINE HCl | MSD)

an antidepressant with an anxiety-reducing sedative component to its action



MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

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addendum

ELAVIL®

(AMITRIPTYLINE HCl | MSD)

Five tablet strengths for differing patient needs. The variety of dosage strengths available with ELAVIL makes possible great prescribing flexibility.

Once-a-day dosage at bedtime is an appropriate way to start—and maintain—many patients on therapy. The simplicity of this regimen helps improve patient compliance. ELAVIL may also be prescribed in divided daily doses.

A sedative effect may be apparent before the antidepressant effect of ELAVIL is noted. An adequate therapeutic effect may take as long as 30 days to develop.

100 mg
75 mg
50 mg



These tablets may be advantageous when initiating therapy with once-daily bedtime dosage in adult outpatients. The usual starting dosage is 75 mg daily. Therapy may be initiated with 50 to 100 mg daily. This may be increased by 25 or 50 mg as necessary in the bedtime dose to a total of 150 mg per day.

These tablets may also be convenient for many hospitalized patients. These patients may need 100 mg a day initially which can be increased gradually to 200 mg a day if necessary. A small number of such patients may need as much as 300 mg a day.

25 mg



This tablet may prove useful when initiating therapy with divided daily doses in adult outpatients. Starting dosage is usually 75 mg daily. If necessary, this dosage may be increased gradually to a total of 150 mg a day. Increases are made preferably in the late afternoon or bedtime doses.

10 mg



Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher doses.

NOTE: The usual maintenance dosage of ELAVIL is 50 to 100 mg per day which may be given in a single dose preferably at bedtime. In some patients 40 mg per day is sufficient. This drug is not recommended for patients under 12 years of age.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure; in patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child. Not recommended for patients under 12 years of age.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required; paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported. Use with caution in patients with impaired liver function.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue, rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; tablets containing 75 mg and 100 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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in Psychiatry."
a transcultural look at masks as symbols

Eskimo Finger Mask, Koskokwin River, Alaska.
Used by shaman as wand to drive out evil spirits.
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University of Pennsylvania, Philadelphia, Pa.
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LIFT THE MASK OF SCHIZOPHRENIC SYMPTOMS

'Stelazine' provides effective control of hallucinations, delusions, anxiety and other psychotic symptoms.
With its apparent activating effect, 'Stelazine' is especially useful in withdrawn, apathetic or detached patients.

- Controls psychotic symptoms
- Seldom causes excessive sedation
- Convenient b.i.d. dosage

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications
Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of the manifestations of psychotic disorders.

Possibly effective: To control excessive anxiety, tension and agitation as seen in neuroses or associated with somatic conditions.

'Stelazine' has not been shown effective in the management of behavioral complications in patients with mental retardation.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose or greatly depressed states due to C.N.S. depressants; blood dyscrasias; bone marrow depression; liver damage.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy.

Use in pregnancy only when necessary for patient's welfare.

Precautions: Use cautiously in angina. Avoid high doses and parenteral administration when cardiovascular system is impaired. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Additive effect is possible with other C.N.S. depressants. Prolonged administration of high doses may result in cumulative effects with severe C.N.S. or vasomotor symptoms. If retinal changes occur, discontinue drug. Agranulocytosis, thrombocytopenia, pancytopenia, anemia, cholestatic jaundice, liver damage have been reported.

Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudo-parkinsonism, persistent tardive dyskinesia.

Other adverse reactions reported with Stelazine (trifluoperazine HCl, SK&F*) or other phenothiazines:* Some adverse effects are more frequent or intense in specific disorders (e.g., mitral insufficiency or pheochromocytoma).

Grand mal convulsions; altered cerebrospinal fluid proteins; cerebral edema; prolongation and intensification of the action of C.N.S. depressants, atropine, heat, and organophosphorus insecticides; nasal congestion, headache, nausea, constipation, obstipation, adynamic ileus, inhibition of ejaculation; reactivation of psychotic processes, catatonic-like states; hypotension (sometimes fatal); cardiac arrest; leukopenia, eosinophilia, pancytopenia, agranulocytosis, thrombocytopenic purpura; jaundice, biliary stasis; menstrual irregularities, galactorrhea, gynecomastia, false positive pregnancy tests; photosensitivity, itching, erythema, urticaria, eczema up to exfoliative dermatitis; asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions; peripheral edema; reversed epinephrine effect; hyperpyrexia; a systemic lupus erythematosus-like syndrome; pigmentary retinopathy; with prolonged administration of substantial doses, skin pigmentation, epithelial keratopathy, and lenticular and corneal deposits. EKG changes have been reported, but relationship to myocardial damage is not confirmed. Discontinue long-term, high-dose therapy gradually. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 1 mg., 2 mg., 5 mg., and 10 mg., in bottles of 100; in Single Unit Packages of 100 (intended for institutional use only); Injection, 2 mg./ml.; and Concentrate (intended for institutional use only) 10 mg./ml.

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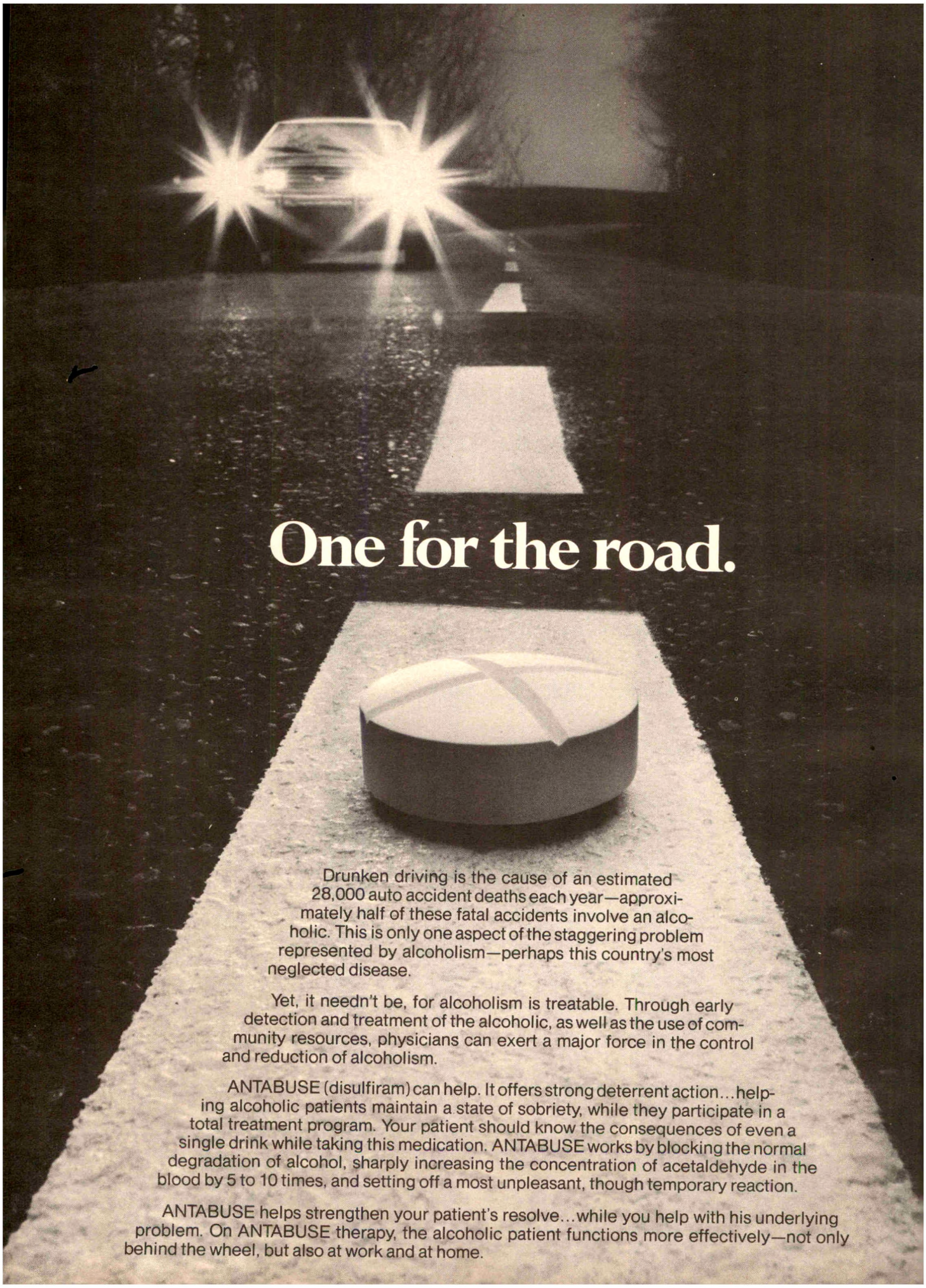
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TRIFLUOPERAZINE HCl

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ANTABUSE (disulfiram) can help. It offers strong deterrent action...helping alcoholic patients maintain a state of sobriety, while they participate in a total treatment program. Your patient should know the consequences of even a single drink while taking this medication. ANTABUSE works by blocking the normal degradation of alcohol, sharply increasing the concentration of acetaldehyde in the blood by 5 to 10 times, and setting off a most unpleasant, though temporary reaction.

ANTABUSE helps strengthen your patient's resolve...while you help with his underlying problem. On ANTABUSE therapy, the alcoholic patient functions more effectively—not only behind the wheel, but also at work and at home.

BRIEF SUMMARY
(For full prescribing information, see package circular.)
ANTABUSE® (disulfiram) In Alcoholism
INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)
CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, e.g. cough syrups, tonics, and the like, should not be given ANTABUSE.
ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

WARNINGS: ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.
The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.
THE ANTABUSE-ALCOHOL REACTION:
ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.
The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.
The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.
DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.
Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.
It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.
Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.
CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.
USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.
PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)
Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.
Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.
ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)
Optic neuritis, peripheral neuritis, and polyneuritis may occur following administration of ANTABUSE.
Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.
In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.
Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.
One case of cholestatic hepatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.
DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.
INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.
MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.
NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.
DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.
TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, such a test reaction should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.
However, where a test reaction is deemed necessary, the suggested procedure is as follows:
After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (1/2 oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.
MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokalemia has been reported.
HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100.
No. 810—Each tablet (scored) contains 500 mg. disulfiram, in bottles of 50 and 1,000. **7626**

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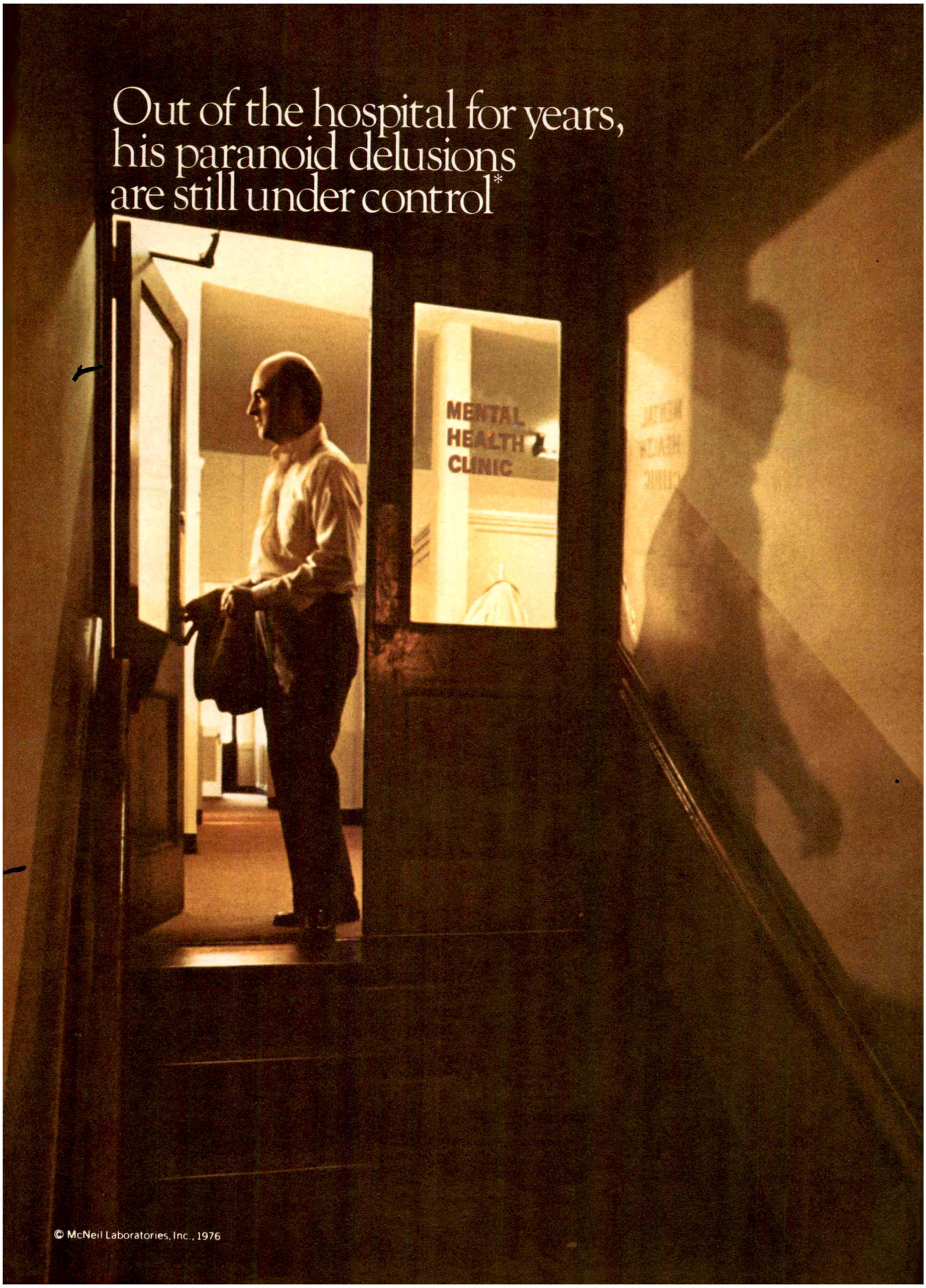
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For long-term control with minimal risk of toxicity

Highly effective in a wide range of psychotic symptoms,[1-7] such as hallucinations, delusions, suspiciousness, hostility, mania, psychomotor agitation, etc., in both acute and chronic disorders.

Usually leaves patients relatively alert and responsive...[1-3] better able to cope with job and family responsibilities...as well as easier to reach with supportive and rehabilitative measures.

Permits aggressive titration to effective dosage levels,[1,4] up to 100 mg/day orally (with minimal risk of usual troublesome reactions) to achieve optimal response when patient is inadequately controlled at lower dosage...to help you rapidly control and stabilize new patients, promptly regain control during periods of exacerbation.

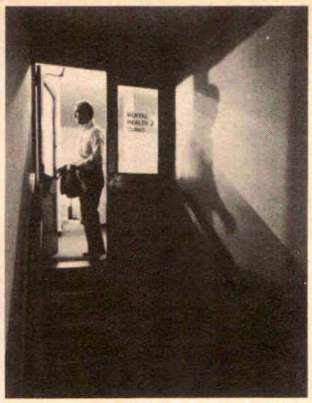
Common side effects easily controlled.[1,3-6] Although extrapyramidal symptoms (EPS) have been reported frequently, they are usually dose-related and readily controlled with dose adjustment or antiparkinson drugs. EPS often diminish spontaneously with continued use of HALDOL haloperidol.

*Not an actual case history, this situation illustrates the action of HALDOL haloperidol as reported in various clinical studies (available on request).

Reduces risk of certain troublesome reactions.[2-5,7] Transient hypotension occurs rarely and severe orthostatic hypotension has not been reported. Marked sedation is rare, although some instances of drowsiness have been reported. In addition, with chronic use, it is unlikely to cause hepatic damage, serious hematologic reactions, photosensitivity reactions and skin rashes...and has minimal effect on renal function.

Please turn page for information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions.

Important: Full directions for use should be read before HALDOL haloperidol is administered or prescribed.



Haldol® (haloperidol)

tablets/concentrate/injection

For long-term control of psychotic symptoms with minimal risk of toxicity

A Dosage Form for Every Need:

5 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg., 5 mg. and 10 mg.

A tasteless, odorless, colorless liquid concentrate for better patient acceptability: 2 mg. per ml.

A rapid-acting injection for psychiatric emergencies: 5 mg. per ml., with 1.8 mg. methylparaben and 0.2 mg. propylparaben per ml., and lactic acid for pH adjustment to 3.4±0.2.

Indications: HALDOL haloperidol is indicated for use in the management of manifestations of psychotic disorders.

It is also indicated for the control of tics and vocal utterances of Gilles de la Tourette's syndrome.

Contraindications: HALDOL haloperidol is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy:*** Safe use of HALDOL haloperidol in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of haloperidol orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children: Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General: Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL haloperidol, decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL haloperidol may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL haloperidol should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, epinephrine should not be used since HALDOL haloperidol may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL haloperidol may lower the convulsive threshold. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant antiparkinson medication is required, it may have to be continued after HALDOL haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including antiparkinson agents, are administered concomitantly with HALDOL haloperidol. When HALDOL haloperidol is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose-related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of antiparkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Persistent Tardive Dyskinesia*—Tardive dyskinesia may appear during long-term therapy or after therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear irreversible. There is no known effective treatment. All antipsychotic agents should be discontinued. The syndrome may be masked by reinstitution of drug, increasing dosage, or switching to a different antipsychotic agent. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL haloperidol is administered or prescribed. 9/74

References:

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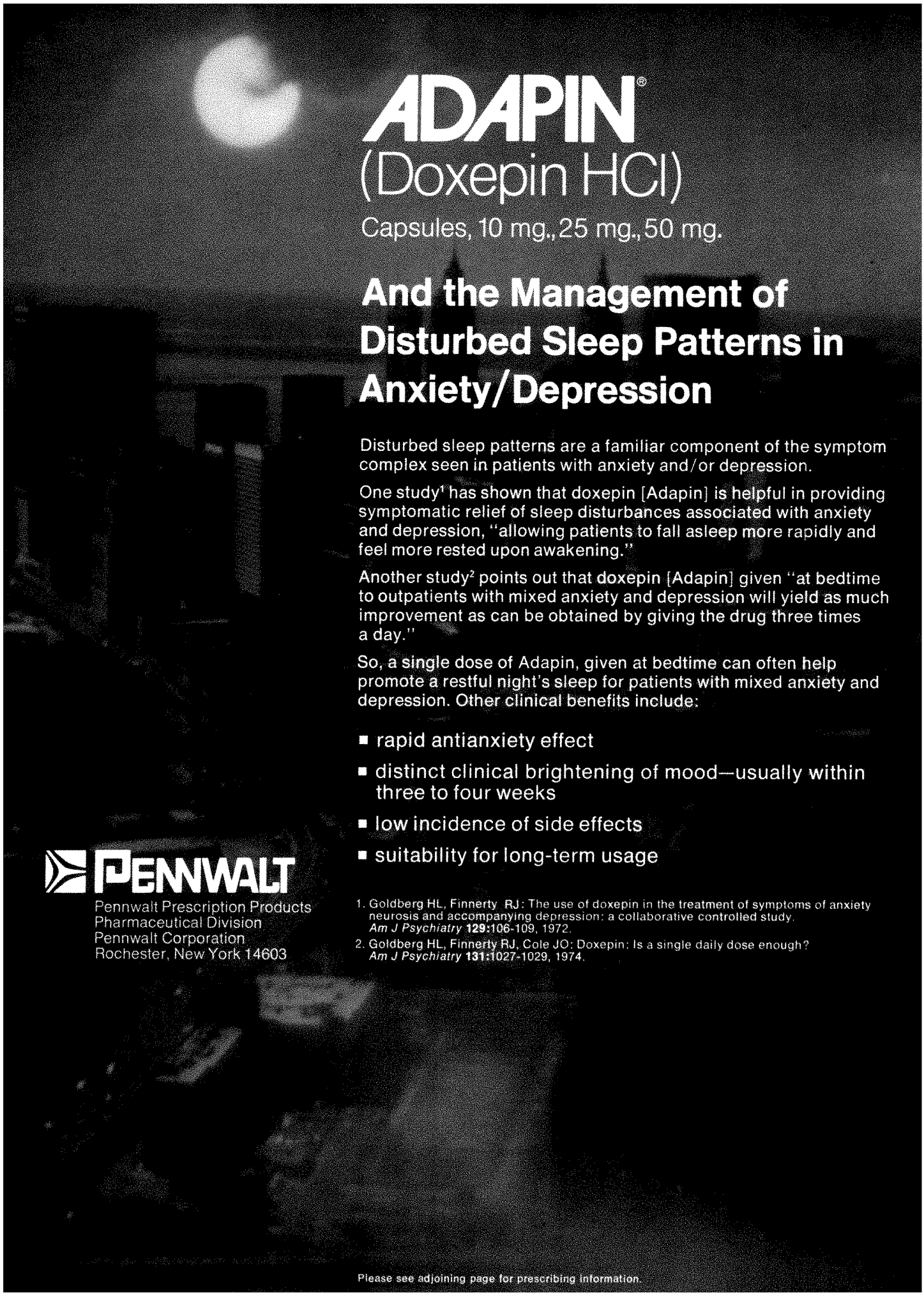
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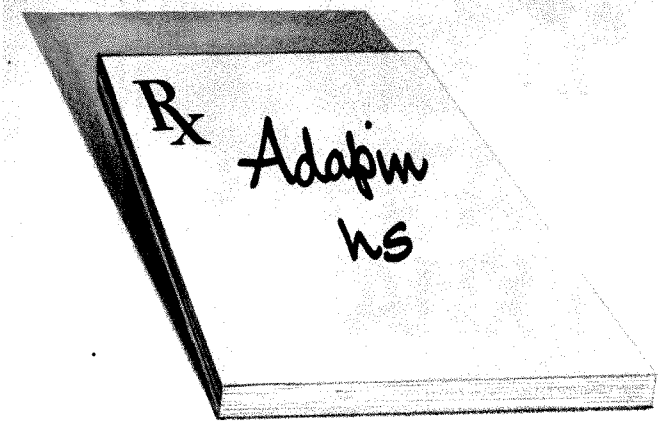
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1. Goldberg HL, Finnerty RJ: The use of doxepin in the treatment of symptoms of anxiety neurosis and accompanying depression: a collaborative controlled study. *Am J Psychiatry* **129**:106-109, 1972.
2. Goldberg HL, Finnerty RJ, Cole JO: Doxepin: Is a single daily dose enough? *Am J Psychiatry* **131**:1027-1029, 1974.

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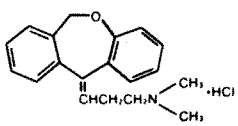
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INDICATIONS

In controlled clinical evaluations, **Adapin** has shown marked antianxiety and significant antidepressant effects. **Adapin** has been found to be well tolerated even in elderly patients.

Adapin is indicated for the treatment of patients with:

1. Psychoneurotic anxiety and/or depressive reactions.
2. Mixed symptoms of anxiety and depression.
3. Anxiety and/or depression associated with alcoholism.
4. Anxiety associated with organic disease.
5. Psychotic depressive disorders including involutional depression and manic-depressive reactions.

Target symptoms of psychoneurosis that respond particularly well to **Adapin** include: anxiety, tension, depression, somatic symptoms and concerns, insomnia, guilt, lack of energy, fear, apprehension and worry.

Because **Adapin** provides antidepressant as well as antianxiety effects, it is of particular value in patients in whom anxiety masks depression. Patients who have not responded to other antianxiety or antidepressant drugs may benefit from **Adapin.**

In a large series of patients systematically observed for withdrawal symptoms, none were reported—a finding which is consistent with the virtual absence of euphoria as a side effect and the lack of addictive potential characteristic of this type of chemical compound.

CONTRAINDICATIONS

Because **Adapin** has an anticholinergic effect, it is contraindicated in patients with glaucoma or a tendency toward urinary retention.

Use of **Adapin** is contraindicated in patients who have been found hypersensitive to it.

WARNINGS

Usage in Pregnancy—Adapin has not been evaluated in pregnant patients. Therefore, it should not be used during pregnancy unless, in the judgment of the physician, it is essential to the welfare of the patient.

In animal reproduction studies of **Adapin (doxepin hydrochloride),** gross and microscopic examination of the offspring gave no evidence of drug-related teratogenic effect. Following doses of up to 25 mg./kg./day for 8 to 9 months, no changes were observed in the number of live births, litter size, or lactation. A decreased rate of conception was observed when male rats were given 25 mg./kg./day for prolonged periods—an effect which has occurred with other psychotropic drugs and has been attributed to drug effect on the central and/or autonomic nervous systems.

Usage in Children—The use of **Adapin** in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors—Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with **Adapin.** The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

PRECAUTIONS

Drowsiness may occur with **Adapin;** therefore, patients should be warned of its possible occurrence and cautioned against driving a motor vehicle or operating hazardous machinery while taking the drug.

Patients should also be cautioned that the effects of alcoholic beverages may be increased.

Since suicide is an inherent risk in depressed patients and remains a risk through the initial phases of improvement, depressed patients should be closely supervised.

Although **Adapin** has shown effective tranquilizing activity, the possibility of activating or unmasking latent psychotic symptoms should be kept in mind.

Compounds structurally related to **Adapin** can block the effects of guanethidine and similarly acting compounds. However, at the usual clinical dosages, 75 mg. to 150 mg. per day, **Adapin** has been given concomitantly with guanethidine without blocking its antihypertensive effect. But at dosages of 300 mg. per day or higher, **Adapin** has exerted a significant blocking effect.

Adapin, like other structurally related psychotropic drugs, potentiates norepinephrine response in animals. But this effect has not been observed with **Adapin** in humans, which is in accord with the low incidence of tachycardia reported clinically.

ADVERSE REACTIONS

Anticholinergic Effects: Dry mouth, blurred vision and constipation have been reported. These are usually mild, and often subside as therapy is continued or dosage reduced.

Central Nervous System Effects: Drowsiness has been observed. It usually occurs early in the course of therapy and tends to subside as therapy continues. (See Dosage and Administration section.)

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported adverse effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects (such as increased sweating), weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

DOSAGE AND ADMINISTRATION

In most patients with mild to moderate anxiety and/or depression: 10 mg. to 25 mg. t.i.d. to start. A starting dosage of 10 mg. t.i.d. for a period of four days may reduce the initial drowsiness experienced by some patients, and may be tried in cases where drowsiness is clinically undesirable. Decrease or increase the dosage at appropriate intervals according to individual response. Usual optimum dosage is 75 mg. to 150 mg. per day.

In some patients with mild symptomatology or emotional symptoms accompanying organic disease, dosage as low as 25 mg. to 50 mg. per day has provided effective control.

In more severe anxiety and/or depression: 50 mg. t.i.d. may be required to start—if necessary, gradually increase to 300 mg. per day. Additional effectiveness is rarely obtained by exceeding 300 mg. per day.

Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

OVERDOSAGE

Symptoms—An increase of any of the reported adverse reactions, primarily excessive sedation and anticholinergic effects such as blurred vision and dry mouth. Other effects may be: pronounced tachycardia, hypotension and extrapyramidal symptoms.

Treatment—Essentially symptomatic; supportive therapy in the case of hypotension and excessive sedation.

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
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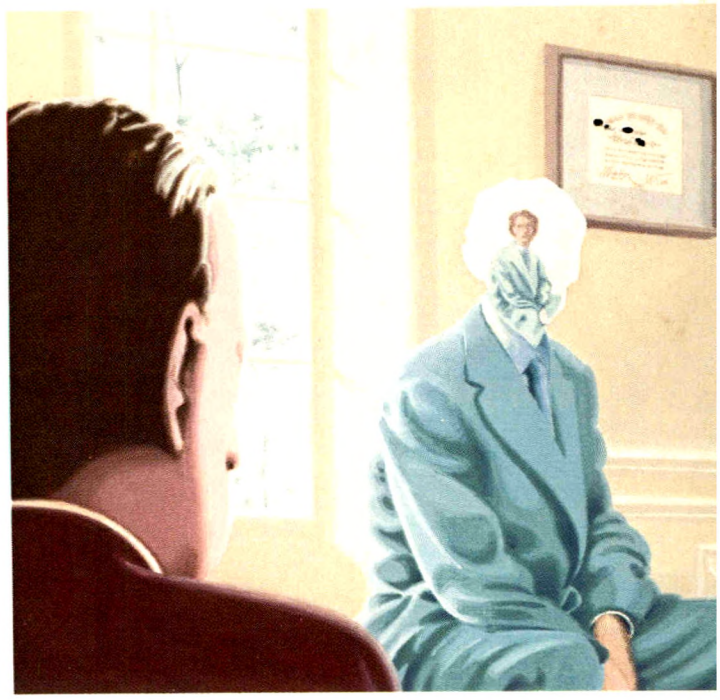
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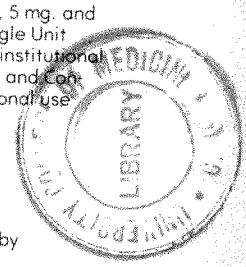
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Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudo-parkinsonism, persistent tardive dyskinesia.

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by Elaine Hilberman, M.D.

Mythologies about rape are legion. However, in recent years behavioral scientists have accumulated a body of information about rape and about an unfolding series of reactions experienced by the victim after rape. The aim of this concise, tightly reasoned book is to summarize what is now known about the needs and experiences of the victim and her family, and to provide a framework in which the clinician can more knowledgeably supply assistance and support. This document, published by the American Psychiatric Association, is the result of a project of the Association's Committee on Women.

Pointing out that the profound impact of rape stress is best understood in the context of rape as "a crime against the person and not the hymen," Dr. Hilberman sees rape as the ultimate violation of the self short of homicide, as an act of violence and humiliation in which not only is the victim's very existence threatened, and her inner and most private space invaded, but her autonomy and control are totally demolished. Dr. Hilberman shows that if and when the victim reports the crime, she is confronted with a complex series of yet additional stresses growing out of her contact with the hospital, police, courts, media and community opinion. Additionally, her crisis differs from other crises in that her usual social support system is likely to be disrupted. Her immediate needs are for empathy and safety, and a sense of control over what is happening in her dealings with the several agencies. Dr. Hilberman shows that in the absence of sensitivity to these needs, the experience of reporting becomes another assault.

This book presents a professional, sobering, and balanced picture of the problems of the rape victim and details what the clinician must know—about local hospital policy, criminal justice procedure, rape statutes, and community attitudes and services—in order to be able to treat victims with an understanding of the larger context in which rape occurs.

ELAINE HILBERMAN, M.D., *is in the Department of Psychiatry at the University of North Carolina School of Medicine.*

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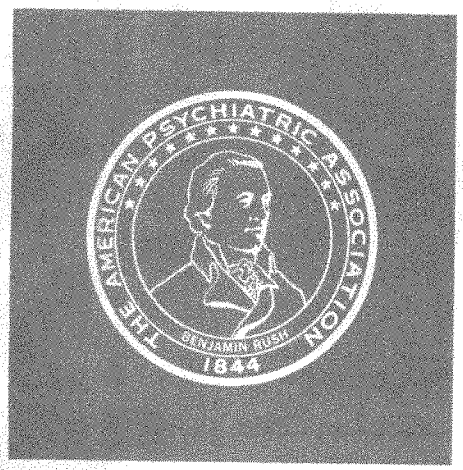
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2. Schildkraut JJ: Tranylcypromine: effects on norepinephrine metabolism in rat brain. Am J Psychiatry 126:925–931, 1970
3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
4. Brosin H: Communication systems of the consultation process, in The Psychiatric Consultation. Edited by Mendel W, Solomon P. New York, Grune & Stratton, 1968, pp 1–12

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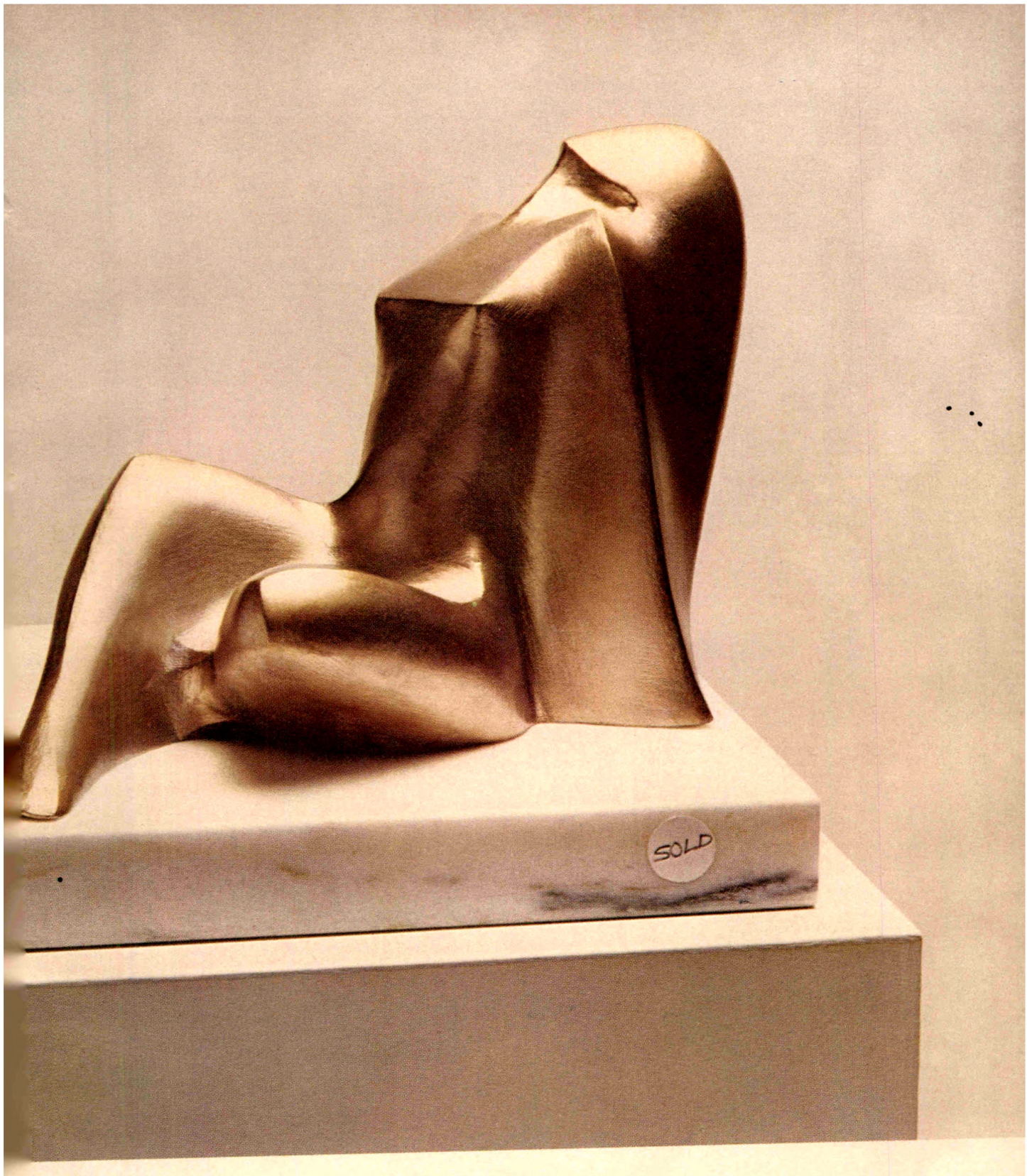
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Actions. Navane is a psychotropic agent of the thioxanthene series. Navane possesses certain chemical and pharmacological similarities to the piperazine phenothiazines and differences from the aliphatic group of phenothiazines. Navane's mode of action has not been clearly established.

Indications. Navane is effective in the management of manifestations of psychotic disorders.

Contraindications. Navane is contraindicated in patients with circulatory collapse, comatose states, central nervous system depression due to any cause, and blood dyscrasias. Navane is contraindicated in individuals who have shown hypersensitivity to the drug. It is not known whether there is a cross-sensitivity between the thioxanthenes and the phenothiazine derivatives, but this possibility should be considered.

Warnings. *Usage in Pregnancy* – Safe use of Navane during pregnancy has not been established. Therefore, this drug should be given to pregnant patients only when, in the judgment of the physician, the expected benefits from the treatment exceed the possible risks to mother and fetus. Animal reproduction studies and clinical experience to date have not demonstrated any teratogenic effects.

In the animal reproduction studies with Navane, there was some decrease in conception rate and litter size, and an increase in resorption rate in rats and rabbits, changes which have been similarly reported with other psychotropic agents. After repeated oral administration to rats (5 to 15 mg/kg/day), rabbits (3 to 50 mg/kg/day), and monkeys (1 to 3 mg/kg/day) before and during gestation, no teratogenic effects were seen. (See Precautions.)

Usage in Children–The use of Navane in children under 12 years of age is not recommended because safety and efficacy in the pediatric age group have not been established.

As is true with many CNS drugs, Navane may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery, especially during the first few days of therapy. Therefore, the patient should be cautioned accordingly.

As in the case of other CNS-acting drugs, patients receiving Navane should be cautioned about the possible additive effects (which may include hypotension) with CNS depressants and with alcohol.

Precautions. An antiemetic effect was observed in animal studies with Navane; since this effect may also occur in man, it is possible that Navane may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

In consideration of the known capability of Navane and certain other psychotropic drugs to precipitate convulsions, extreme caution should be used in patients with a history of convulsive disorders or those in a state of alcohol withdrawal since it may lower the convulsive threshold. Although Navane potentiates the actions of the barbiturates, the dosage of the anticonvulsant therapy should not be reduced when Navane is administered concurrently.

Caution as well as careful adjustment of the dosage is indicated when Navane is used in conjunction with other CNS depressants other than anticonvulsant drugs.

Though exhibiting rather weak anticholinergic properties, Navane should be used with caution in patients who are known or suspected to have glaucoma, or who might be exposed to extreme heat, or who are receiving atropine or related drugs.

Use with caution in patients with cardiovascular disease.

Also, careful observation should be made for pigmentary retinopathy, and lenticular pigmentation (fine lenticular pigmentation has been noted in a small number of patients treated with Navane for prolonged periods). Blood dyscrasias (agranulocytosis, pancytopenia, thrombocytopenic purpura), and liver damage (jaundice, biliary stasis) have been reported with related drugs.

Undue exposure to sunlight should be avoided. Photosensitive reactions have been reported in patients on Navane.

Intramuscular Administration – As with all intramuscular preparations, Navane Intramuscular should be injected well within the body of a relatively large muscle. The preferred sites are the upper outer quadrant of the buttock (i.e., gluteus maximus) and the mid-lateral thigh.

The deltoid area should be used only if well developed, such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Adverse Reactions. *Note:* Not all of the following adverse reactions have been reported with Navane (thiothixene). However, since Navane has certain chemical and pharmacologic similarities to the phenothiazines, all of the known side effects and toxicity associated with phenothiazine therapy should be borne in mind when Navane is used.

Cardiovascular effects: Tachycardia, hypotension, lightheadedness, and syncope. In the event hypotension occurs, epinephrine should not be used as a pressor agent since a paradoxical further lowering of blood pressure may result. Nonspecific EKG changes have been observed in some patients receiving Navane. These changes are usually reversible and frequently disappear on continued Navane therapy. The incidence of these changes is lower than that observed with some phenothiazines. The clinical significance of these changes is not known.

CNS effects: Drowsiness, usually mild, may occur although it usually subsides with continuation of Navane therapy. The incidence of sedation appears similar to that of the piperazine group of phenothiazines, but less than that of certain aliphatic phenothiazines. Restlessness, agitation and insomnia have been noted with Navane. Seizures and paradoxical exacerbation of psychotic symptoms have occurred with Navane infrequently.

Hyperreflexia has been reported in infants delivered from mothers having received structurally related drugs.

In addition, phenothiazine derivatives have been associated with cerebral edema and cerebrospinal fluid abnormalities.

Extrapyramidal symptoms, such as pseudoparkinsonism, akathisia, and dystonia have been reported. Management of these extrapyramidal symptoms depends upon the type and severity. Rapid relief of acute symptoms may require the use of an injectable antiparkinson agent. More slowly emerging symptoms may be managed by reducing the dosage of Navane and/or administering an oral antiparkinson agent.

Persistent Tardive Dyskinesia: As with all antipsychotic agents tardive dyskinesia may appear in some patients on long term therapy or may occur after drug therapy has been discontinued. The risk seems to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia: antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear.

Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked.

It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time, the syndrome may not develop.

Hepatic effects: Elevations of serum transaminase and alkaline phosphatase, usually transient, have been infrequently observed in some patients. No clinically confirmed cases of jaundice attributable to Navane have been reported.

Hematologic effects: As is true with certain other psychotropic drugs, leukopenia and leucocytosis, which are usually transient, can occur occasionally with Navane. Other antipsychotic drugs have been associated with agranulocytosis, eosinophilia, hemolytic anemia, thrombocytopenia and pancytopenia.

Allergic reactions: Rash, pruritus, urticaria, photosensitivity and rare cases of anaphylaxis have been reported with Navane. Undue exposure to sunlight should be avoided. Although not experienced with Navane, exfoliative dermatitis and contact dermatitis (in nursing personnel) have been reported with certain phenothiazines.

Endocrine disorders: Lactation, moderate breast enlargement and amenorrhea have occurred in a small percentage of females receiving Navane. If persistent, this may necessitate a reduction in dosage or the discontinuation of therapy. Phenothiazines have been associated with false positive pregnancy tests, gynecomastia, hypoglycemia, hyperglycemia, and glycosuria.

Autonomic effects: Dry mouth, blurred vision, nasal congestion, constipation, increased sweating, increased salivation, and impotence have occurred infrequently with Navane therapy. Phenothiazines have been associated with miosis, mydriasis, and adynamic ileus.

Other adverse reactions: Hyperpyrexia, anorexia, nausea, vomiting, diarrhea, increase in appetite and weight, weakness or fatigue, polydipsia and peripheral edema.

Although not reported with Navane, evidence indicates there is a relationship between phenothiazine therapy and the occurrence of a systemic lupus erythematosus-like syndrome.

NOTE: Sudden deaths have occasionally been reported in patients who have received certain phenothiazine derivatives. In some cases the cause of death was apparently cardiac arrest or asphyxia due to failure of the cough reflex. In others, the cause could not be determined nor could it be established that death was due to phenothiazine administration.

Dosage and Administration. Dosage of Navane should be individually adjusted depending on the chronicity and severity of the condition. In general, small doses should be used initially and gradually increased to the optimal effective level, based on patient response.

Some patients have been successfully maintained on once-a-day Navane therapy.

Usage in children under 12 years of age is not recommended because safe conditions for its use have not been established.

Navane Intramuscular Solution–For Intramuscular Use Only. Where more rapid control and treatment of acute behavior is desirable, the intramuscular form of Navane may be indicated. It is also of benefit where the very nature of the patient's symptomatology, whether acute or chronic, renders oral administration impractical or even impossible.

For treatment of acute symptomatology or in patients unable or unwilling to take oral medication, the usual dose is 4 mg of Navane Intramuscular administered 2 to 4 times daily. Dosage may be increased or decreased depending on response. Most patients are controlled on a total daily dosage of 16 to 20 mg. The maximum recommended dosage is 30 mg/day. An oral form should supplant the injectable form as soon as possible. It may be necessary to adjust the dosage when changing from the intramuscular to oral dosage forms. Dosage recommendations for Navane Capsules and Concentrate appear in the following paragraphs.

Navane Capsules; Navane Concentrate–In milder conditions, an initial dose of 2 mg three times daily. If indicated, a subsequent increase to 15 mg/day total daily dose is often effective.

In more severe conditions, an initial dose of 5 mg twice daily.

The usual optimal dose is 20 to 30 mg daily. If indicated, an increase to 60 mg/day total daily dose is often effective. Exceeding a total daily dose of 60 mg rarely increases the beneficial response.

Overdosage. Manifestations include muscular twitching, drowsiness, and dizziness. Symptoms of gross overdosage may include CNS depression, rigidity, weakness, torticollis, tremor, salivation, dysphagia, hypotension, disturbances of gait, or coma.

Treatment: Essentially symptomatic and supportive. For Navane oral, early gastric lavage is helpful. For Navane oral and Intramuscular, keep patient under careful observation and maintain an open airway, since involvement of the extrapyramidal system may produce dysphagia and respiratory difficulty in severe overdosage. If hypotension occurs, the standard measures for managing circulatory shock should be used (I.V. fluids and/or vasoconstrictors).

If a vasoconstrictor is needed, levarterenol and phenylephrine are the most suitable drugs. Other pressor agents, including epinephrine, are not recommended, since phenothiazine derivatives may reverse the usual pressor elevating action of these agents and cause further lowering of blood pressure.

If CNS depression is present, recommended stimulants include amphetamine, dextroamphetamine, or caffeine and sodium benzoate. Picrotoxin or pentylenetetrazol should be avoided. Extrapyramidal symptoms may be treated with antiparkinson drugs.

There are no data on the use of peritoneal or hemodialysis, but they are known to be of little value in phenothiazine intoxication.

How Supplied. Navane (thiothixene) is available as capsules containing 1 mg, 2 mg, 5 mg, and 10 mg. of thiothixene in bottles of 100 and 1,000. Navane is also available as capsules containing 20 mg of thiothixene in bottles of 100 and 500.

Navane (thiothixene hydrochloride) Concentrate is available in 120 ml (4 oz.) bottles with an accompanying dropper calibrated at 2 mg, 4 mg, 5 mg, 6 mg, 8 mg, and 10 mg. Each ml contains thiothixene hydrochloride equivalent to 5 mg of thiothixene. Contains alcohol, U.S.P. 7.0% v/v (small loss unavoidable).

Navane (thiothixene hydrochloride) Intramuscular solution is available in a 2 ml amber glass vial in packages of 10. Each ml contains thiothixene hydrochloride equivalent to 2 mg of thiothixene, dextrose 5% w/v, benzyl alcohol 0.9% w/v, and propyl gallate 0.02% w/v.

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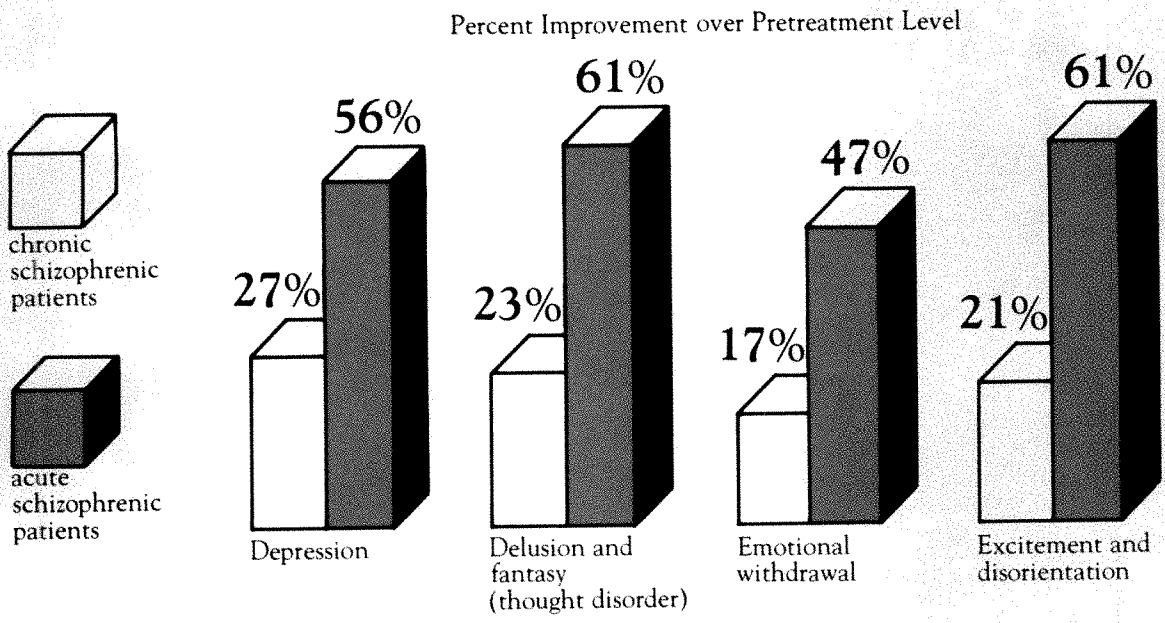
evaluated by psychiatric nurses—NOSIE (Nurse's Observation Scale for Inpatient Evaluation)

evaluated by patients—SRSS (Self-Rating Symptom Scale)

compared with various other agents including chlorpromazine, trifluoperazine, doxepin, thiothixene, as well as placebo—from 11 published, controlled/double-blind studies involving 482 patients[1-11]

helps control symptoms of acute and chronic schizophrenia.

Evaluation (by BPRS) of symptomatic response in 221 chronic and acute schizophrenic patients[12]



- ☐ significant improvement noted in behavior patterns, severity of symptoms significantly reduced
- ☐ helps control major target symptoms in responsive patients
- ☐ dosage strengths to meet individual needs
- ☐ adverse CNS manifestations—other than extrapyramidal reactions—infrequent*

***See "Adverse Reactions" section in the prescribing information on last page.**

and...

second... help for those close to the schizophrenic

EMP (EMPATHIC) COMMUNICATIONS

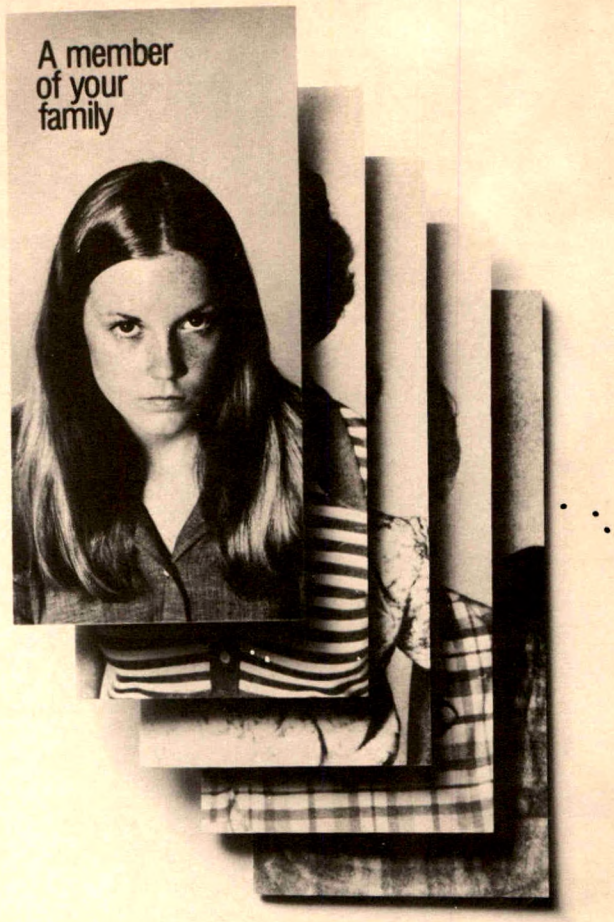
The symptoms of schizophrenia can be bizarre and puzzling—especially to family and others in close contact with the patient. To help them understand the disease, and thus be more helpful to the patient, Dome Laboratories offers *EMP* (Empathic) *Communications,* a comprehensive new education program developed especially for lay readers.

By providing authoritative, easy-to-understand booklets, this program encourages family and friends to cooperate in the patient's adjustment to therapy and rehabilitation.

...and for your information

PSYCHIATRIC INTERFACES

A new and ongoing publication of firsthand information that deals with current psychiatric trends and offers opinions on mental-health care from prominent psychiatrists.



EMP (EMPATHIC) COMMUNICATIONS
for the patient's family

The first in a series of booklets that answers a number of worrisome questions on how to cope with schizophrenia.

Other booklets offer specific information for *individual* members of the family and others in close contact with the patient, such as the employer, co-workers, paramedical personnel.

now...more than symptomatic control for the schizophrenic

EMP COMMUNICATIONS—an impressive educational program

PSYCHIATRIC INTERFACES—an outstanding information service

and

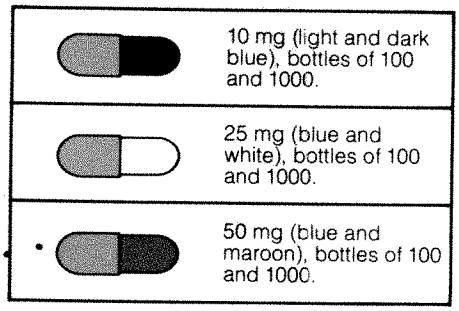
Daxolin™
(loxapine succinate)

a promising neuroleptic agent for symptomatic control of schizophrenia

See next page for prescribing information.

Daxolin™ (loxapine succinate)

individualized dosage strengths to meet the varying needs of the schizophrenic



10 mg (light and dark blue), bottles of 100 and 1000.

25 mg (blue and white), bottles of 100 and 1000.

50 mg (blue and maroon), bottles of 100 and 1000.

Description: DAXOLIN (loxapine succinate), a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl) dibenz[b,f][1,4] oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg of loxapine succinate is equivalent to 1 mg of loxapine.

Actions: Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar onset and duration of primary pharmacologic effect was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates but are unconjugated in the feces.

Indications: DAXOLIN is indicated for the manifestations of schizophrenia.

Contraindications: DAXOLIN (loxapine succinate) is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.).

DAXOLIN is contraindicated in individuals with known hypersensitivity to the drug.

Warnings: *Usage in Pregnancy:* Safe use of DAXOLIN during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratogenicity was observed in studies in rats, rabbits or dogs. With the exception of one rabbit study, the highest dosage was two times the maximum recommended human dose and in some studies the dose was lower. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

DAXOLIN, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

Precautions: DAXOLIN should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving DAXOLIN at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect also may occur in man, loxapine may mask signs of overdosage of toxic drugs and obscure conditions such as intestinal obstruction and brain tumor.

DAXOLIN should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; and transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinsonian medication.

Adverse Reactions: *CNS Effects:* Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased. It usually subsides with continued DAXOLIN (loxapine succinate) therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramical Reactions—Neuromuscular (extrapyramidal) reactions during the administration of DAXOLIN have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved parkinsonism-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of DAXOLIN dosage or by administration of antiparkinsonian drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreoathetoid movements. These reactions sometimes require reduction or temporary withdrawal of DAXOLIN dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—In keeping with the action of all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients—especially females—on high-dose therapy. The symptoms are persistent and, in some patients, appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of the extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonian agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome; if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, light-headedness, and syncope have been reported. A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin Effects: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapi The possibility of photosensitivity and/or phototoxi occurring has not been excluded; skin rashes of unc tain etiology have been observed in a few patients dur hot summer months.

Endocrine Effects: No endocrine abnormalities ha been reported.

Anticholinergic Effects: Dry mouth, nasal congesti constipation, and blurred vision have occurred; these more likely to occur with concomitant use of antiparkin nian agents.

Other Adverse Reactions: Nausea, vomiting, wei gain, weight loss, dyspnea, ptosis, hyperpyrexia, flush facies, headache, paresthesia, and polydipsia ha been reported in some patients.

Dosage and Administration: DAXOLIN (loxapine suc nate) is administered orally, usually in divided doses, t to four times a day. Daily dosage (in terms of base equ alents) should be adjusted to the individual patier needs as assessed by the severity of symptoms and p vious history of response to antipsychotic drugs. Init dosage of 10 mg twice daily is recommended althoug in severely disturbed patients, initial dosage up to a to of 50 mg daily may be desirable. Dosage should then b increased fairly rapidly over the first seven to ten da until there is effective control of psychotic symptoms. T usual therapeutic and maintenance range is 60 mg to 1 mg daily. However, as with other antipsychotic drug some patients respond to lower dosage and others r quire higher dosage for optimal benefit. Daily dosag higher than 250 mg is not recommended. For maint nance therapy, dosage should be reduced to the lowe level compatible with symptom control; many patier have been maintained satisfactorily at dosages in t range of 20 mg to 60 mg daily.

How Supplied: DAXOLIN™ (loxapine succinate) is su plied in the following base-equivalent strengths:

CAPSULES Hard Shell Printed "DOME"

10 mg—Light and Dark Blue; bottles of 100 and 1000

25 mg—Blue and White; bottles of 100 and 1000.

50 mg—Blue and Maroon; bottles of 100 and 1000.

References: **1.** Van der Velde CD, Kiltie H: *Curr Th Res* 17:1-12, 1975. **2.** Gallant DM, et al: *Curr Ther Res* 15:205-209, 1973. **3.** Cooperative Study, Psychopharmacology Research Branch, NIMH: *J Clin Pharmacol* 10:175-181, 1970. **4.** Clark ML, et a *J Clin Pharmacol* 15:286-294, 1975. **5.** Bishop MP, Gallant DM: *Curr Ther Res* 12:594-597, 1970. **6.** Charalampous KD, et al: *Curr Ther Res* 16:829-837, 1974. **7.** Gershon S, et al: *Curr Ther Res* 12:280-285, 1970. **8.** Steinbook RM, et al: *Curr Ther Res* 15:1-7, 1973. **9.** Shopsin B, et al: *Curr Th Res* 14:739-748, 1972. **10.** Charalampous KD, Freemesser GF, Smalling KF: *J Clin Pharmacol* 14:464-469, 1974. **11.** Clark ML, et al: *Dis Nerv Sys* 33:783-791, 1972. **12.** Data on file, Medical Research Department, Dome Laboratories.

Manufactured for Dome Laboratories by Lederle Laboratories Division, American Cyanamid Company, Pearl River, N.Y.

Dome Laboratories

Division Miles Laboratories Inc
West Haven Connecticut 06516 USA

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The October 1976 issue of

The American Journal of Psychiatry

will feature

- **Overview: Research on the Psychology of Women. II. Women in Families, Work, and Psychotherapy by Anne M. Seiden**

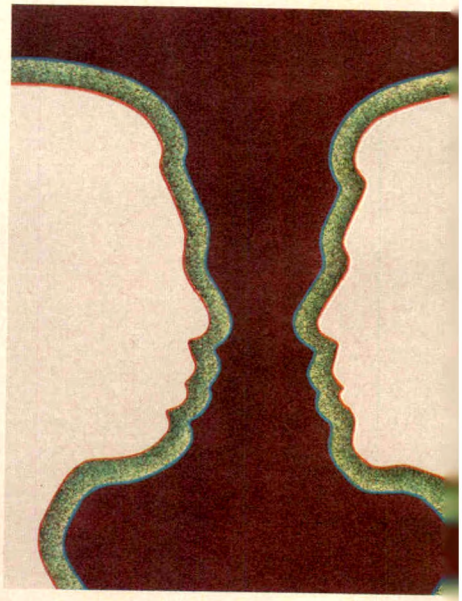
In treating the schizophrenic, there's something different about

MOBAN®
(molindone HCl)



acts on the RAS with low incidence of adverse effects

EEG studies show that MOBAN® exerts its effect on the ascending reticular activating system. This often helps to encourage increased social participation, receptivity and communication in schizophrenic patients.



Artist's representation of the reticular activating system, with neuronal activity passing on to cortical and subcortical structures.

- generally minimizes drowsiness to help produce improved functioning
  1) to hasten the discharge of hospitalized patients
  2) to keep ambulatory patients at home or on the job

- tranquilizes without muscle relaxant or incoordinating effect

- acts to alleviate target symptoms or reduce their severity
  1) in acute patients, some symptomatic improvement evident in a few days
  2) in chronic patients, symptomatic improvement may not be evident until 2-4 weeks
  3) maximum benefits attained by end of third month (continued maintenance therapy as required)

SOCIAL ADJUSTMENT PROFILE CHART

of 66 hospitalized schizophrenic patients treated with MOBAN® (molindone HCl) for 1 year or more*

Adjustment	Percent
To live on open ward	91%
To function with privileges	89%
To hold hospital job	85%
To leave hospital	70%
To maintain home	33%
To hold employment	32%

*Data on file, Endo Laboratories

How to use MOBAN® (molindone HCl)

a wide range of dosage strengths available in **Tablets:**



- Titrate for 1) therapeutic response and 2) minimal effective maintenance dose.
- Use lower doses for the elderly and debilitated.

NOTE: Transient drowsiness may occur during the first 1-2 weeks.

Whenever your schizophrenic patient may benefit from less sedation

MOBAN®
(molindone HCl)

Please see last page of advertisement for full prescribing information.

Moban® is an Endo registered U.S. trademark; U.S. Pat. 3,491,093.

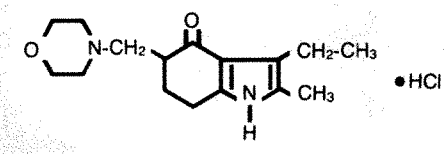
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Subsidiary of E. I. du Pont de Nemours & Co. (Inc.)
Garden City, N.Y. 11530
DUPONT

MOBAN® (molindone HCl)

a dihydroindolone chemically distinct from phenothiazines, thioxanthenes, butyrophenones

DESCRIPTION MOBAN® (molindone hydrochloride) is a dihydroindolone compound which is not structurally related to the phenothiazines, the butyrophenones or the thioxanthenes.

MOBAN® is 3-ethyl-6, 7-dihydro-2-methyl-5-(morpholinomethyl) indol-4 (5H)-one hydrochloride. It is a white crystalline powder, freely soluble in water and alcohol and has a molecular weight of 312.67.



MOLINDONE HYDROCHLORIDE

ACTIONS MOBAN® (molindone hydrochloride) has a pharmacological profile in laboratory animals which predominantly resembles that of major tranquilizers causing reduction of spontaneous locomotion and aggressiveness, suppression of a conditional response and antagonism of the bizarre stereotyped behavior and hyperactivity induced by amphetamines. In addition, MOBAN® antagonizes the depression caused by the tranquilizing agent tetrabenazine.

In human clinical studies tranquilization is achieved in the absence of muscle relaxing or incoordinating effects. Based on EEG studies, MOBAN® exerts its effect on the ascending reticular activating system.

Human metabolic studies show MOBAN® (molindone hydrochloride) to be rapidly absorbed and metabolized when given orally. Unmetabolized drug reached a peak blood level at 1.5 hours. Pharmacological effect from a single oral dose persists for 24-36 hours. There are 36 recognized metabolites with less than 2-3% unmetabolized MOBAN® being excreted in urine and feces.

INDICATIONS MOBAN® (molindone hydrochloride) is indicated in the management of the manifestations of schizophrenia.

CONTRAINDICATIONS MOBAN® (molindone hydrochloride) is contraindicated in severe central nervous system depression (alcohol, barbiturates, narcotics, etc.) or comatose states, and in patients with known hypersensitivity to the drug.

WARNINGS Usage in Pregnancy: Studies in the pregnant patient have not been carried out. Reproduction studies have been performed in the following animals:

Pregnant Rats oral dose—	
no adverse effect	20 mg/kg/day—2 weeks
no adverse effect	40 mg/kg/day—2 weeks
Pregnant Mice oral dose—	
slight increase resorptions	20 mg/kg/day—9 days
slight increase resorptions	40 mg/kg/day—9 days
Pregnant Rabbits oral dose—	
no adverse effect	5 mg/kg/day—12 days
no adverse effect	10 mg/kg/day—12 days
no adverse effect	20 mg/kg/day—12 days

Animal reproductive studies have not demonstrated a teratogenic potential. The anticipated benefits must be weighed against the unknown risks to the fetus if used in pregnant patients.

Nursing Mothers: Data are not available on the content of MOBAN® (molindone hydrochloride) in the milk of nursing mothers.

Usage in Children: Use of MOBAN® (molindone hydrochloride) in children below the age of twelve years is not recommended because safe and effective conditions for its usage have not been established.

PRECAUTIONS Some patients receiving MOBAN® (molindone hydrochloride) may note drowsiness initially and they should be advised against activities requiring mental alertness until their response to the drug has been established.

Increased activity has been noted in patients receiving MOBAN®. Caution should be exercised where increased activity may be harmful.

MOBAN® does not lower the seizure threshold in experimental animals to the degree noted with more sedating antipsychotic drugs. However, convulsive seizures have been reported in a few instances.

The physician should be aware that this tablet preparation contains calcium sulfate as an excipient and that calcium ions may interfere with the absorption of preparations containing phenytoin sodium and tetracyclines.

MOBAN® has an antiemetic effect in animals. A similar effect may occur in humans and may obscure signs of intestinal obstruction or brain tumor.

ADVERSE REACTIONS CNS EFFECTS The most frequently occurring effect is initial drowsiness that generally subsides with continued usage of the drug or lowering of the dose.

Noted less frequently were depression, hyperactivity and euphoria.

Neurological

Extrapyramidal Reactions

Extrapyramidal reactions noted below may occur in susceptible individuals and are usually reversible with appropriate management.

Akathisia

Motor restlessness may occur early.

Parkinson Syndrome

Akinesia, characterized by rigidity, immobility and reduction of voluntary movements and tremor, have been observed. Occurrence is less frequent than akathisia.

Dystonic Syndrome

Prolonged abnormal contractions of muscle groups occur infrequently. These symptoms may be managed by the addition of a synthetic antiparkinson agent (other than L-dopa), small doses of sedative drugs, and/or reduction in dosage.

Autonomic Nervous System

Occasionally blurring of vision, tachycardia, nausea, dry mouth and salivation have been reported. Urinary retention and constipation may occur particularly if anticholinergic drugs are used to treat extrapyramidal symptoms.

Hematological

There have been rare reports of leucopenia and leucocytosis. If such reactions occur, treatment with MOBAN® may continue if clinical symptoms are absent. Alterations of blood glucose, liver function tests, B.U.N., and red blood cells have not been considered clinically significant.

Metabolic and Endocrine Effects

Alteration of thyroid function has not been significant. Amenorrhea has been reported infrequently. Resumption of menses in previously amenorrheic women has been reported. Initially heavy menses may occur. Lactation associated with MOBAN® therapy has not been reported. Increase in libido has been noted in some patients. Impotence has not been reported. Although both weight gain and weight loss have been in the direction of normal or ideal weight, excessive weight gain has not occurred with MOBAN®.

Cardiovascular

Rare, transient, non-specific T wave changes have been reported on E.K.G. Association with a clinical syndrome has not been established. Rarely has significant hypotension been reported.

Ophthalmological

Lens opacities and pigmentary retinopathy have not been reported where patients have received MOBAN® (molindone hydrochloride). In some patients, phenothiazine induced lenticular opacities have resolved following discontinuation of the phenothiazine while continuing therapy with MOBAN®.

Skin

Early, non-specific skin rash, probably of allergic origin, has occasionally been reported. Skin pigmentation has not been seen with MOBAN® usage alone.

MOBAN® (molindone hydrochloride) has certain pharmacological similarities to other antipsychotic agents. Because adverse reactions are often extensions of the pharmacological activity of a drug, all of the known pharmacological effects associated with other antipsychotic drugs should be kept in mind when MOBAN® is used. Upon abrupt withdrawal after prolonged high dosage an abstinence syndrome has not been noted.

Tardive Dyskinesia

Although not reported with MOBAN® (molindone hydrochloride) late appearing dyskinesias have been associated with certain antipsychotic agents.

Tardive dyskinesia associated with other agents has appeared in some patients on long-term therapy and has also appeared after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). There may be involuntary movements of extremities.

There is no known effective treatment of tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time the syndrome may not develop.

DOSAGE AND ADMINISTRATION Initial and maintenance doses of MOBAN® (molindone hydrochloride) should be individualized, and the minimal effective dose should be employed. Elderly and debilitated patients should be started on lower dosage.

DOSAGE SCHEDULE, BASED ON SEVERITY OF SYMPTOMATOLOGY

1. Mild—5 mg three or four times a day; an increase to 15 mg three or four times a day may be required.
2. Moderate—10 mg three or four times a day; an increase to 25 mg three or four times a day may be required.
3. Severe—daily dosage as high as 225 mg may be required.

DRUG INTERACTIONS Potentiation of drugs administered concurrently with MOBAN® (molindone hydrochloride) has not been reported. Additionally, animal studies have not shown increased toxicity when MOBAN® is given concurrently with representative members of three classes of drugs (i.e., barbiturates, chloral hydrate and antiparkinson drugs).

MANAGEMENT OF OVERDOSAGE Symptomatic, supportive therapy should be the rule.

Gastric lavage is indicated for the reduction of absorption of MOBAN® (molindone hydrochloride) which is freely soluble in water.

Since the adsorption of MOBAN® (molindone hydrochloride) by activated charcoal has not been determined, the use of this antidote must be considered of theoretical value.

Emesis in a comatose patient is contraindicated. Additionally, while the emetic effect of apomorphine is blocked by MOBAN® in animals, this blocking effect has not been determined in humans.

A significant increase in the rate of removal of unmetabolized MOBAN® from the body by forced diuresis, peritoneal or renal dialysis would not be expected. (Only 2% of a single ingested dose of MOBAN® is excreted unmetabolized in the urine.)

However, poor response of the patient may justify use of these procedures. While the use of laxatives or enemas might be based on general principles, the amount of unmetabolized MOBAN® in feces is less than 1%. Extrapyramidal symptoms have responded to the use of diphenhydramine (Benadryl*) and the synthetic anticholinergic antiparkinson agents (i.e., Artane*, Cogentin*, Akineton*).

HOW SUPPLIED As tablets in bottles of 100 and 1000 with potencies and colors as follows: 5 mg orange, 10 mg lavender, 25 mg light green.

*Benadryl—Trademark, Parke Davis and Co.
*Artane—Trademark, Lederle Laboratories
*Cogentin—Trademark, Merck Sharp & Dohme
*Akineton—Trademark, Knoll Pharmaceutical Co.

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When a period of intensive residential treatment is indicated: THE BROWN SCHOOLS

A community within a community to provide individualized treatment within a residential milieu.

A program designed for: psychiatric illness, behavior problems in neurological patients, and rehabilitation of the mentally retarded.

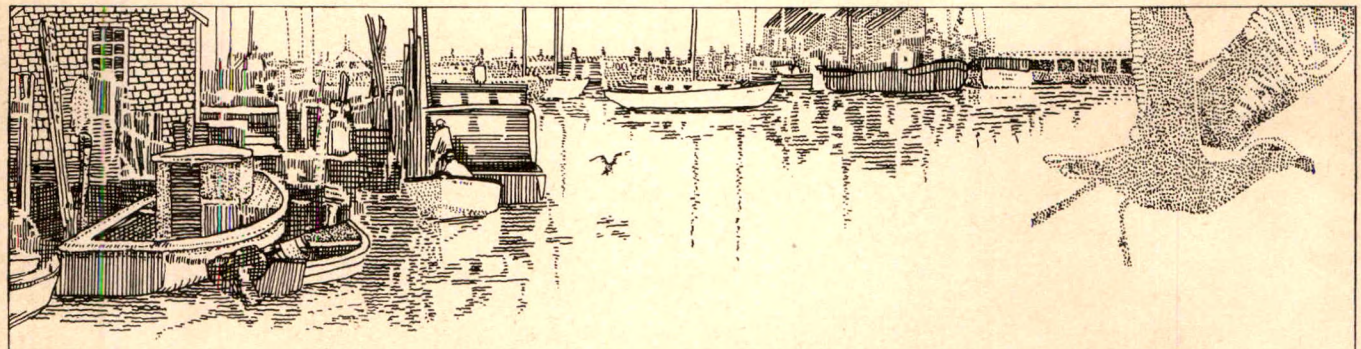
Three separate treatment centers plus a transitional treatment center provide individually prescribed programs of care, education, treatment and training for children, adolescents and adults. The centers are geographically separated to provide the proper residential group, yet near enough to benefit from the combined training and experience of a wide range of staff members.

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Jackson R. Day, M.D./Medical and Psychiatric Director; James L. Boynton, M.D./Director, the Oaks Residential Treatment Center; John L. Carrick, M.D./Staff Psychiatrist; Orrie L. Forbis, Jr., M.D./Staff Psychiatrist; James D. Hinkle, M.D./Staff Psychiatrist; Other Medical Staff: Thomas F. Caldwell, D.D.S./Patrick A. Cato, M.D./ Kurt Lekisch, M.D./Willis M. Thorstad, M.D.

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THE BROWN SCHOOLS



People and Predicaments

Of Life and Distress on Martha's Vineyard

Milton Mazer

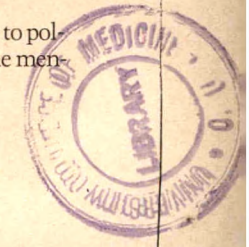
This is the compelling story of an experiment begun in 1961 that eventually affected the lives of almost all of the residents of the island of Martha's Vineyard. The author writes engagingly of the island and its year-round inhabitants, a community of some seven thousand persons of diverse ethnic and social backgrounds.

With sympathy and insight Milton Mazer analyzes the stresses that are peculiar to the conditions of life on the island, and he describes the kinds of psychological disorders that are precipitated by those stresses. He reports, without technical jargon, the results of a five-year study of a great variety of psychosocial predicaments experienced by the people of the island. Finally he examines the catalytic effect the mental health center and its research findings have had on the development of other supportive agencies and how the community established a network of human services to meet its needs.

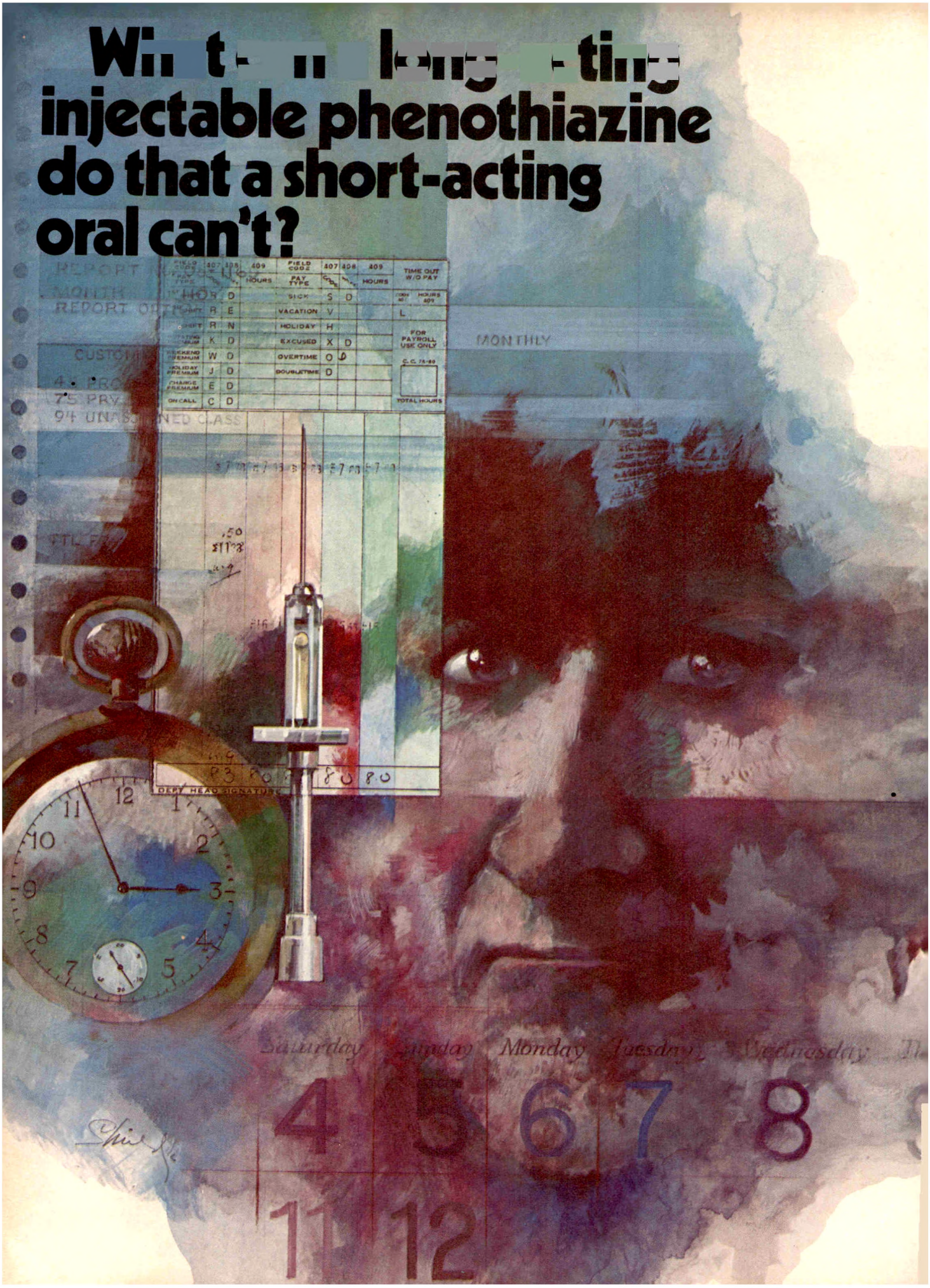
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Wi[illegible] injectable phenothiazine do that a short-acting oral can't?



It can save time

Prolixin Decanoate (Fluphenazine Decanoate Injection), with duration of action that may last up to 4 weeks or longer in patients on maintenance therapy, can effect important savings in nursing time.

Approximate Staff Time Required to Medicate 18 Schizophrenic Patients*

	
8 a.m. ¾ hr. 1 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 28 days for most patients
= 2¼ hours nursing time	4 minutes required for each injection
2¼ hrs. x 28 days = 63 hours of nursing time every 28 days	= 1 hr., 10 minutes nursing time in 28 days
NURSING TIME SAVED IN 28 DAYS	61 hours and 50 minutes or more than 7½ eight-hour working days

*Adapted from Platt R: Br J Social Psychiatry 2: 187-191, 1968.

It can save money

Martin and Townend[1], who found from their study of Prolixin Decanoate that 15 of 39 patients could be maintained on 25 mg. every 4 weeks, also note that on this basis "a year's maintenance on chlorpromazine represents the order of 110 grams of phenothiazine as opposed to 0.33 gram of fluphenazine." Translating this into dollars shows the following potential hospital savings on the basis of patient population:

Agent and amount/year	Form	Cost/patient/ year	Cost/500 patients/ year
Chlorpromazine (SKF brand) 110 grams	8 oz. concentrate 100 mg./ml.†	$48.75*	$24,375
Prolixin Decanoate .33 grams	5 ml. vials 25 mg./ml.	$26.08**	$13,040
SAVINGS		$22.67 patient, year	$11,335 500 pts/yr.

* Calculated from prices published in 1976 Red Book.
** Calculated from Squibb 1976 price catalogue.
† With tablets, the annual cost is even greater.

It can even save people– by reducing readmissions

The controlled drug delivery system of Prolixin Decanoate helps get schizophrenic patients out of the hospital and helps them stay out. It promotes continuity of therapy—reducing outpatient drug defaulting from approximately 50% with oral medications according to one report[2] to about 16% according to another report[3].

It reduces the number and length of rehospitalizations. In one study of 103 patients maintained on injections of long-acting fluphenazines, total hospital readmissions for a year were cut from 191 to 50 and inpatient time from 8,713 days to 1,335 days[4].

It facilitates return to a productive life. A 12-month followup of 103 discharged patients revealed 77% in full-time employment or household duties and only 23% unemployed[4].

References:
1. Martin ICA and Townend RA: Brit J Psychiat 124: 173-6, 1974.
2. Goldberg HL, DiMascio A, Chaudhary B: Psychosomatics 11: 173-177, 1970.
3. Medical World News, February 11, 1972, p. 58H.
4. Denham J and Adamson L: Can Psychiat Assoc J 18: 235-7, 1973.

SQUIBB®

Prolixin Decanoate®
Fluphenazine Decanoate Injection

may control schizophrenic symptoms for up to 4 weeks or longer in patients on maintenance therapy.

See next page for brief summary of prescribing information.

rolixin Dec noate®

Fluphenazine Decanoate Injection

may control schizophrenic symptoms for up to 4 weeks or longer in patients on maintenance therapy.

Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per ml. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia or liver damage, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety and efficacy in children have not been established because of inadequate experience in use in children.

Usage in Pregnancy: Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administering this drug to pregnant patients.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anticholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with a history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of antiparkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage.

Persistent Tardive Dyskinesia: As with all antipsychotic agents, persistent and sometimes irreversible tardive dyskinesia may appear in some patients on long-term therapy or may occur after discontinuation of drug. The risk seems greater in elderly patients, especially females, on high dosages. The syndrome is characterized by rhythmical involuntary movements of tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and may be accompanied by involuntary movements of extremities. There is no known effective therapy for tardive dyskinesia; usually the symptoms are not alleviated by antiparkinsonism agents. If the symptoms appear, discontinuation of all antipsychotic agents is suggested. The syndrome may be masked if treatment is reinstituted, or drug dosage increased, or a different antipsychotic agent used. Reports are that fine vermicular movements of the tongue may be an early sign of the syndrome which may not develop if medication is stopped at that time.

Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams; reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia, or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates, and alcohol may occur.

Systemic lupus erythematosus-like syndrome, hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

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in clinically significant depression...

penetrating the symptom barrier to productive psychotherapy

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well as other "barrier symptoms" may be lessened to the point where they no longer come between you and the patient.

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As these preoccupying complaints are lifted, psychotherapy sessions can become more productive. Patients are enabled to respond more fruitfully during therapeutic hours and to resume or pursue more efficiently the necessary activities in their personal lives.

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ELAVIL should not be used during the acute recovery phase following myocardial infarction; in patients hypersensitive to it; in those who have received an MAOI within two weeks; or in children under 12. Patients with cardiovascular disorders should be watched closely. Its safe use during pregnancy and lactation has not been established. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

TABLETS: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg
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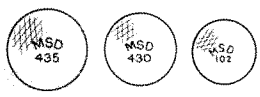
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Once-a-day dosage at bedtime is an appropriate way to start—and maintain—many patients on therapy. The simplicity of this regimen helps improve patient compliance. ELAVIL may also be prescribed in divided daily doses.

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100 mg
75 mg
50 mg



These tablets may be advantageous when initiating therapy with once-daily bedtime dosage in adult outpatients. The usual starting dosage is 75 mg daily. Therapy may be initiated with 50 to 100 mg daily. This may be increased by 25 or 50 mg as necessary in the bedtime dose to a total of 150 mg per day.

These tablets may also be convenient for many hospitalized patients. These patients may need 100 mg a day initially which can be increased gradually to 200 mg a day if necessary. A small number of such patients may need as much as 300 mg a day.

25 mg 

This tablet may prove useful when initiating therapy with divided daily doses in adult outpatients. Starting dosage is usually 75 mg daily. If necessary, this dosage may be increased gradually to a total of 150 mg a day. Increases are made preferably in the late afternoon or bedtime doses.

10 mg 

Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher doses.

NOTE: The usual maintenance dosage of ELAVIL is 50 to 100 mg per day which may be given in a single dose preferably at bedtime. In some patients 40 mg per day is sufficient. This drug is not recommended for patients under 12 years of age.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure; in patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child. Not recommended for patients under 12 years of age.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required; paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported. Use with caution in patients with impaired liver function.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue, rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

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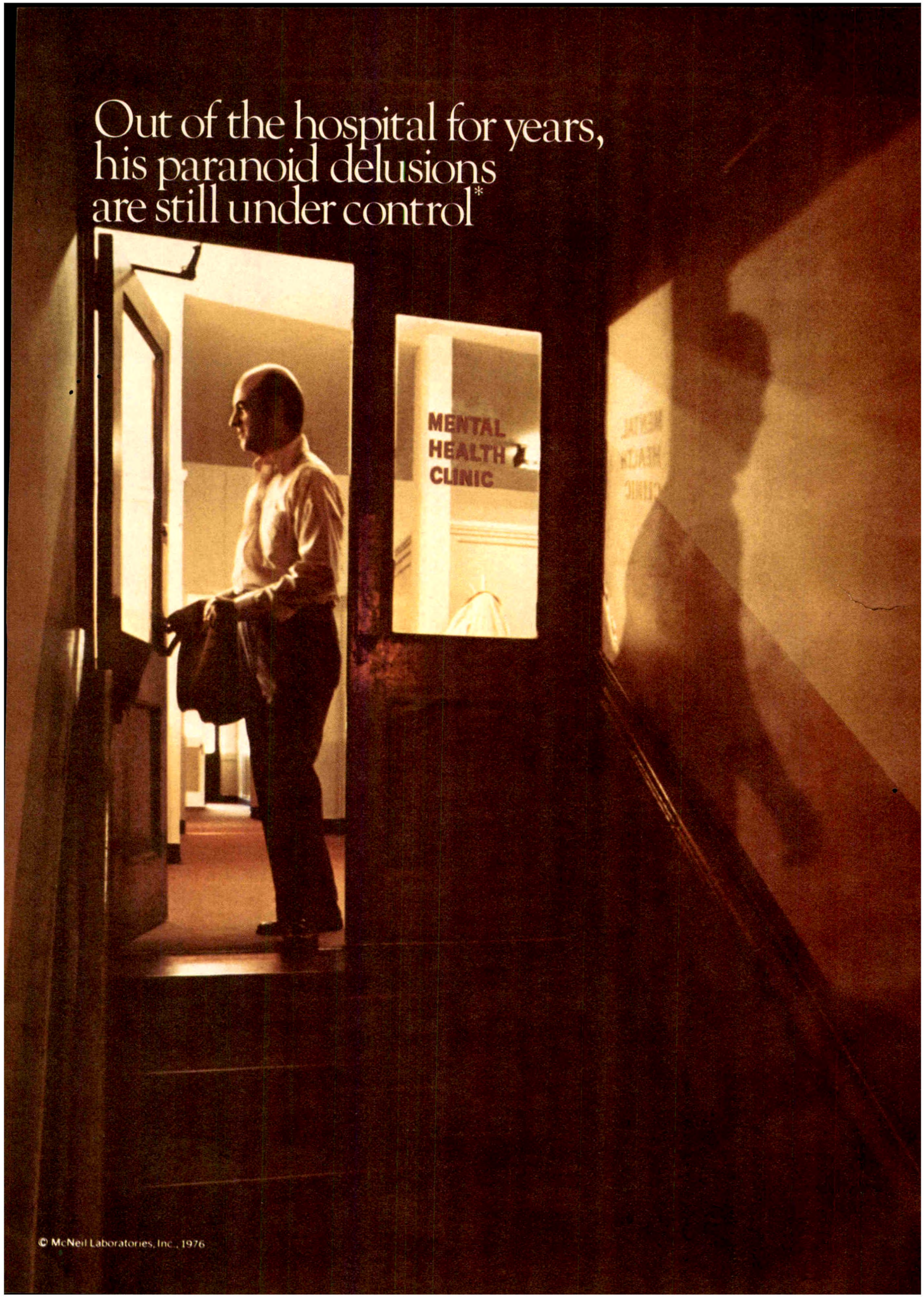
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This new book is the first to demonstrate the standardization of psychiatric treatment through the Problem-Oriented Psychiatric Index. It presents a comprehensive method for scientifically formulating goals and treatment plans.

By Monte J. Meldman, M.D.; Gertrude McFarland, R.N., M.S.; and Edith Johnson, B.A. July, 1976. 202 pages plus FM I-X, 8" x 10", 88 illustrations. Price, $7.50.

MOSBY
TIMES MIRROR

THE C. V. MOSBY COMPANY
11830 WESTLINE INDUSTRIAL DRIVE
ST. LOUIS, MISSOURI 63141


Out of the hospital for years,
his paranoid delusions
are still under control*
MENTAL
HEALTH
CLINIC
© McNeil Laboratories, Inc., 1976

Haldol®
(haloperidol)
tablets/concentrate/injection

For long-term control with minimal risk of toxicity

Highly effective in a wide range of psychotic symptoms,[1-7]
such as hallucinations, delusions, suspiciousness, hostility, mania, psychomotor agitation, etc., in both acute and chronic disorders.

Usually leaves patients relatively alert and responsive...[1-3]
better able to cope with job and family responsibilities...as well as easier to reach with supportive and rehabilitative measures.

Permits aggressive titration to effective dosage levels,[1,4]
up to 100 mg/day orally (with minimal risk of usual troublesome reactions) to achieve optimal response when patient is inadequately controlled at lower dosage...to help you rapidly control and stabilize new patients, promptly regain control during periods of exacerbation.

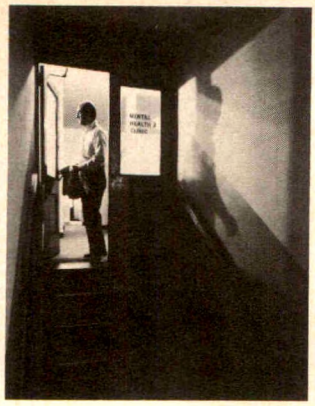
Common side effects easily controlled.[1,3-6]
Although extrapyramidal symptoms (EPS) have been reported frequently, they are usually dose-related and readily controlled with dose adjustment or antiparkinson drugs. EPS often diminish spontaneously with continued use of HALDOL haloperidol.

*Not an actual case history, this situation illustrates the action of HALDOL haloperidol as reported in various clinical studies (available on request).

Reduces risk of certain troublesome reactions.[2-5,7]
Transient hypotension occurs rarely and severe orthostatic hypotension has not been reported. Marked sedation is rare, although some instances of drowsiness have been reported. In addition, with chronic use, it is unlikely to cause hepatic damage, serious hematologic reactions, photosensitivity reactions and skin rashes...and has minimal effect on renal function.

Please turn page for information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions.

Important: Full directions for use should be read before HALDOL haloperidol is administered or prescribed.



Haldol® (haloperidol)

tablets/concentrate/injection

For long-term control of psychotic symptoms with minimal risk of toxicity

A Dosage Form for Every Need:

5 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg., 5 mg. and 10 mg.

A tasteless, odorless, colorless liquid concentrate for better patient acceptability: 2 mg. per ml.

A rapid-acting injection for psychiatric emergencies: 5 mg. per ml., with 1.8 mg. methylparaben and 0.2 mg. propylparaben per ml., and lactic acid for pH adjustment to 3.4±0.2.

Indications: HALDOL haloperidol is indicated for use in the management of manifestations of psychotic disorders.

It is also indicated for the control of tics and vocal utterances of Gilles de la Tourette's syndrome.

Contraindications: HALDOL haloperidol is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy:*** Safe use of HALDOL haloperidol in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of haloperidol orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children: Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General: Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL haloperidol, decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL haloperidol may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL haloperidol should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, epinephrine should not be used since HALDOL haloperidol may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL haloperidol may lower the convulsive threshold. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant antiparkinson medication is required, it may have to be continued after HALDOL haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including antiparkinson agents, are administered concomitantly with HALDOL haloperidol. When HALDOL haloperidol is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose-related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of antiparkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Persistent Tardive Dyskinesia*—Tardive dyskinesia may appear during long-term therapy or after therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear irreversible. There is no known effective treatment. All antipsychotic agents should be discontinued. The syndrome may be masked by reinstitution of drug, increasing dosage, or switching to a different antipsychotic agent. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL haloperidol is administered or prescribed. 9/74

References:

1. Man, P.L.: Dis. Nerv. Syst. *34*:113 (Feb.) 1973. **2.** Sugerman, A.A. et al.: Am. J. Psychiatry *129*:1190 (June) 1964. **3.** Ayd, F.J., Jr.: Med Sci. *18*:55 (Oct.) 1967. **4.** Howard, J.S.: Dis. Nerv. Syst. *35*:458 (Oct.) 1974. **5.** Abuzzahab, F.S., Sr.: Psychosomatics *11*:188 (May-June) 1970. **6.** Darling, H.F.: Dis. Nerv. Syst. *34*:364 (Oct.-Nov.) 1973 **7.** Gerle, B.: Clin. Trials J. *3*:380 (Feb.) 1966.

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Fort Washington, Pa. 19034

In schizophrenia...

Because efficacy and side effects are a single consideration



Loxitane®
LOXAPINE *Lederle*
SUCCINATE

The record speaks louder than words

See LOXITANE prescribing information on last page of this advertisement for contraindications, warnings and precautions and for more detailed information concerning side effects.

From the record:

LOXITANE substan symptoms of schizo

DEPRESSION
Somatic Concern
Anxiety
Guilt Feelings
Depressive Mood



ACUTE SCHIZOPHRENIC PATIENTS
(Treated 3 to 6 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE

TRIFLUOPERAZINE

CHLORPROMAZINE

Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
57	41	53	54	59
37	21			
		42	52	36

CHRONIC SCHIZOPHRENIC PATIENTS
(Treated 8 to 12 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE

TRIFLUOPERAZINE

CHLORPROMAZINE

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
36	27	9	60	28	-6
44	25	-3	48		
				-64	0

tially reduces the phrenia

Results of 11 controlled studies[1] evaluated by the Brief Psychiatric Rating Scale to determine the efficacy of LOXITANE® Loxapine Succinate by comparing it with trifluoperazine and chlorpromazine. They do not imply a claim of differential effectiveness or superiority. However, certain trends, not statistically significant, suggest superiority. These require further tests for confirmation.

1. Data on file, Clinical Research Department, Lederle Laboratories.

THOUGHT DISORDER

Conceptual Disorganization
Grandiosity
Suspiciousness
Hallucinatory Behavior
Unusual Thought Content



Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
68	52	54	79	52
40	50			
		64	67	37

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
20	49	6	58	19	14
8	29	-3	36		
				9	25

ANERGIA

Emotional Withdrawal
Mannerisms and Posturing
Motor Retardation
Blunted Affect



Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
53	43	13	43	52
33	33			
		43	26	32

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
9	15	-1	60	19	23
14	27	-12	42		
				16	21

EXCITEMENT – DISORIENTATION

Excitement
Disorientation



Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
71	61	101	92	46
27	40			
		82	68	31

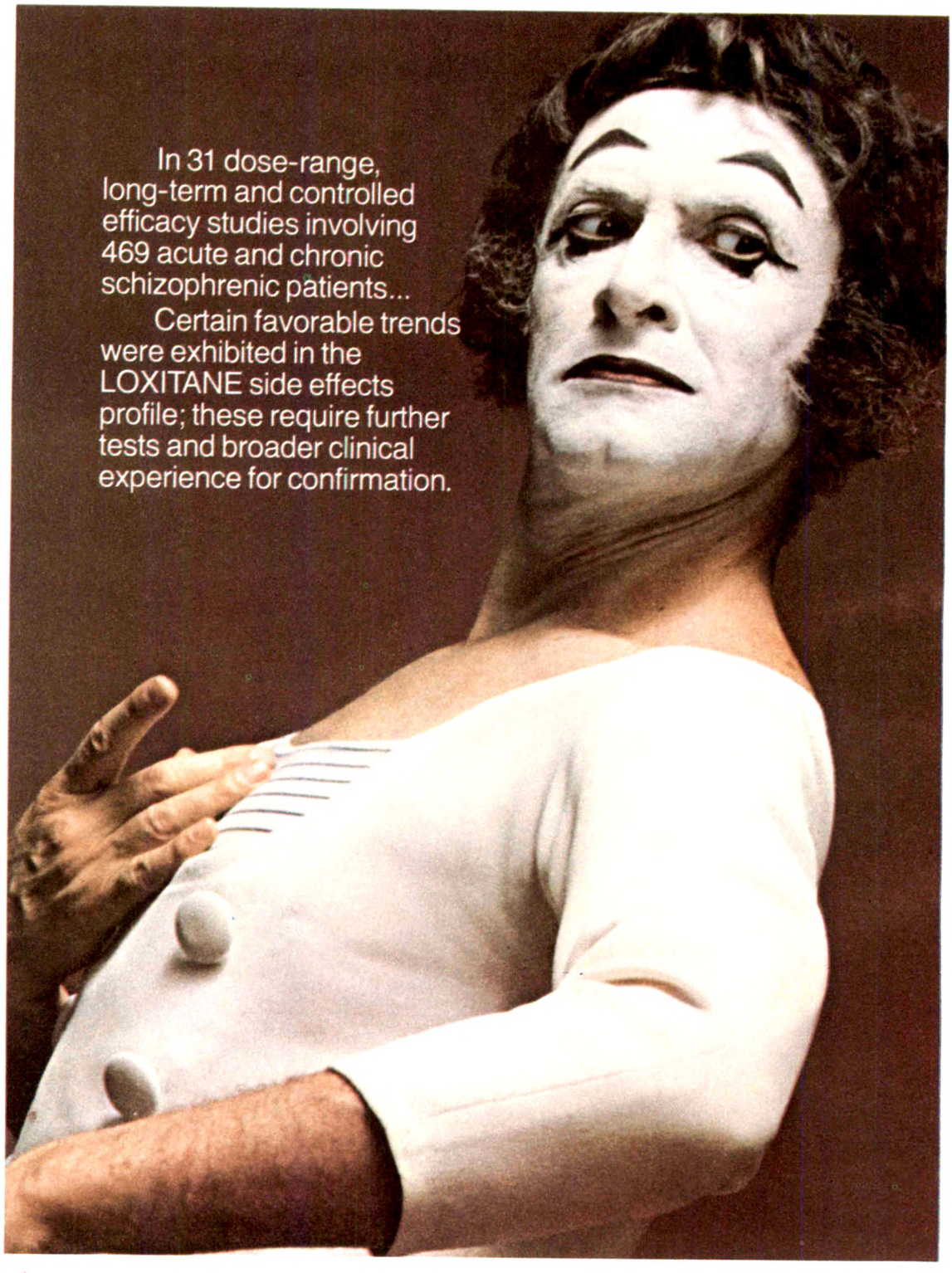
Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
17	26	22	–	49	3
18	44	-24	–		
				42	2



Loxitane®
LOXAPINE SUCCINATE
Lederle

From the record:

LOXITANE has favorable trends



exhibited certain in side effects profile

While cardiac arrest, blood dyscrasias and renal toxicity have been reported with other antipsychotic agents, they have not been seen with LOXITANE. Hepatotoxicity manifested by jaundice or biliary stasis has not been observed. Transient liver enzyme changes, however, have been reported, but it has not been determined whether they are related to LOXITANE administration.

Although a few cases of changes in ECG have been reported, a causal relationship between this reaction and LOXITANE has not been established. Clinical experience with LOXITANE has not demonstrated ocular toxicity, however, the possibility of its occurrence cannot be ruled out at this time. Of the various endocrine abnormalities, only galactorrhea has been noted with LOXITANE, and only in rare instances.

Manifestations of adverse effects on the central nervous system other than extrapyramidal symptoms have been encountered infrequently, and drowsiness, when it occurs, is usually mild and subsides with continued therapy. Skin rashes of uncertain etiology have been observed in a few patients during the hot summer months; therefore the possibility of phototoxicity and/or photosensitivity cannot be excluded. Like certain other antipsychotic agents, LOXITANE lowers the convulsive threshold and should be used with extreme caution in patients with a history of convulsive disorders.

In general, LOXITANE presents a profile of extrapyramidal side effects similar to that of other agents used in the treatment of schizophrenia.

Cardiovascular effects such as hypotension, hypertension, light-headedness and syncope have been reported. Anticholinergic effects seen with LOXITANE include dry mouth, nasal congestion, constipation and blurred vision.

See LOXITANE prescribing information on next page for contraindications, warnings and precautions and for more detailed information concerning side effects.

A range of dosage strengths to suit the patient's individual needs

Supplied

Capsules

10 mg Green and Yellow

25 mg Green Two Tone

50 mg Green and Blue

Recommended Daily Dosage

Initial Dosage	MILD 10 mg b.i.d.	MODERATE 10 mg t.i.d. or q.i.d.	SEVERE 25 mg b.i.d.
First 7 to 10 Days	Increase dosage until psychotic symptoms are controlled. Dosage should not exceed 250 mg/day. Usual dosage during titration: 50 to 150 mg/day.		
Maintenance Dosage	Adjust to lowest effective level. Usual maintenance dosage: 60 to 100 mg/day. Many patients are controlled with dosages as low as 20 to 60 mg/day.		



Loxitane®
LOXAPINE SUCCINATE
Lederle

Because efficacy and side effects are a single consideration

Loxitane®
LOXAPINE Lederle SUCCINATE

Because efficacy and side effects are a single consideration

FOR ORAL USE

DESCRIPTION

LOXITANE *loxapine*, a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f] [1,4]oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg. of loxapine succinate is equivalent to 1 mg. of loxapine.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE *loxapine succinate* is indicated for the manifestations of schizophrenia.

LOXITANE has not been evaluated for the management of behavioral complications in patients with mental retardation, and therefore it cannot be recommended.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

Usage in Pregnancy—Safe use of LOXITANE *loxapine succinate* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children—Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects—Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE *loxapine succinate* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects—Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin—Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Anticholinergic Effects—Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions—Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients. Rarely, galactorrhea and menstrual irregularity of uncertain etiology have been reported.

DOSAGE AND ADMINISTRATION

LOXITANE *loxapine succinate* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

HOW SUPPLIED

LOXITANE *loxapine succinate* is supplied in the following base equivalent strengths:

CAPSULES Hard Shell Printed "Lederle"

10 mg—Green and Yellow; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5360.

25 mg—Green Two Tone; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5361.

50 mg—Green and Blue; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5362.

REV. 7/76

Because schizophrenia is symptoms

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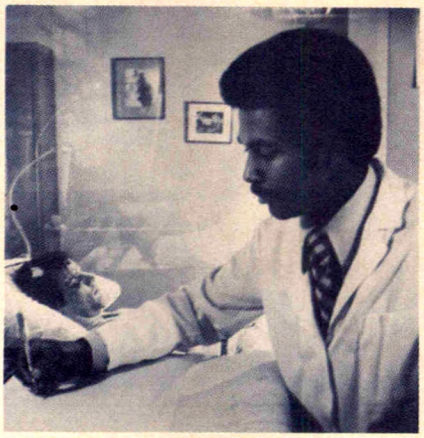
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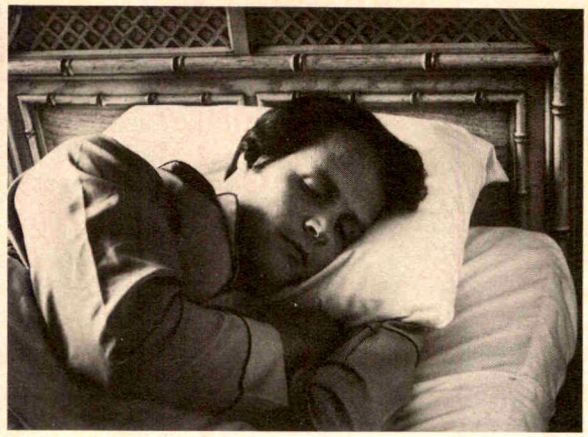
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From the sleep research laboratory:

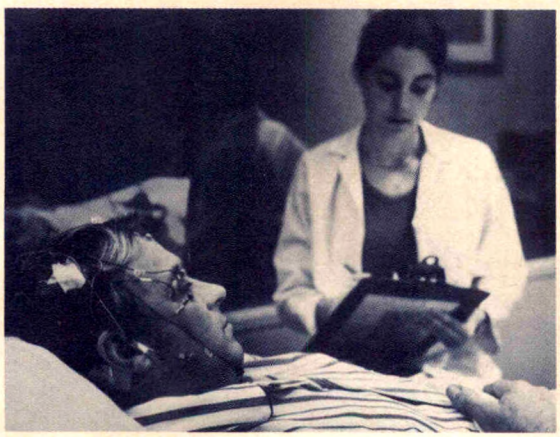
Dalmane® (flurazepam HCl) proved the most effective hypnotic over 14 nights...[1]





14 consecutive nights:
3 in sleep laboratory, 8 at home,
3 in sleep laboratory

...and now, the only one proved effective over 28 nights.[2,3]



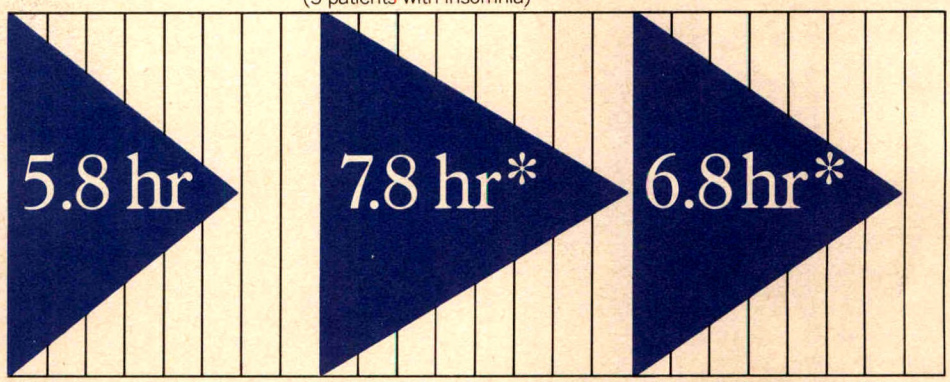


28 consecutive nights:
3 in sleep laboratory, 7 at home,
4 in sleep laboratory, 10 at home,
4 in sleep laboratory[3]

For those patients who need it, Dalmane (flurazepam HCl) alone provides continued effectiveness[2,3]

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But for those patients whose insomnia is a chronic problem, the continued effectiveness of Dalmane is a decided benefit. Even at the end of a 28-night medication period, patients with chronic insomnia were falling asleep faster, spending less time awake during the night, and sleeping substantially longer on Dalmane 30 mg *h.s.* than on baseline placebo nights (average results). This effectiveness was proved[2] and confirmed[3] in two independent sleep research studies using a new 47-night protocol. When similarly evaluated, pentobarbital was ineffective at the end of two weeks.[2]

TOTAL SLEEP TIME (MEAN)[3]
(5 patients with insomnia)



*Significantly increased over baseline placebo ($P < .05$).

In previous studies[1] chloral hydrate and glutethimide lost most or all effectiveness

In fact, continued effectiveness for both inducing and maintaining sleep over 14 consecutive nights[1] has long been an exclusive benefit of Dalmane. No other available sleep agent, including chloral hydrate or glutethimide,[1] has been able to demonstrate such effectiveness in the sleep research laboratory.

The safety record of Dalmane (flurazepam HCl) is well established

Dalmane is relatively safe and well tolerated. Prolonged administration is not generally necessary, but if used repeatedly, periodic blood counts and liver and kidney function tests should be performed.

Dalmane®
(flurazepam HCl)
relatively safe... no need to increase dosage.

ROCHE

Please see following page for a summary of complete product information.

1,5,7,14,28 nights... as needed, the effectiveness of Dalmane® one *h.s.* (flurazepam HCl) C-IV meets the challenge of insomnia

One 30-mg capsule *h.s.*—usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

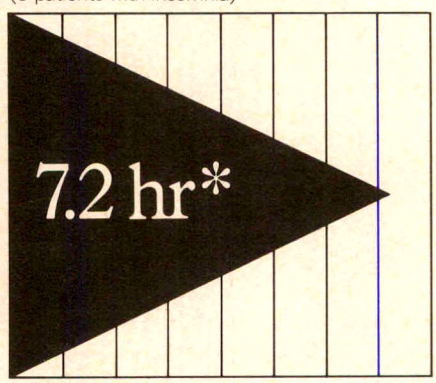
■ Patients fall asleep rapidly, sleep longer on a single *h.s.* dose.

■ Nighttime awakenings and time spent awake are reduced

■ Effectiveness maintained without dosage increase from night to night

■ Patients generally awaken refreshed; morning "hangover" is infrequent

TOTAL SLEEP TIME (OVERALL MEAN)[3]
(5 patients with insomnia)



DALMANE (flurazepam HCl)
NIGHTS 1-3, 12-14, 26-28

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

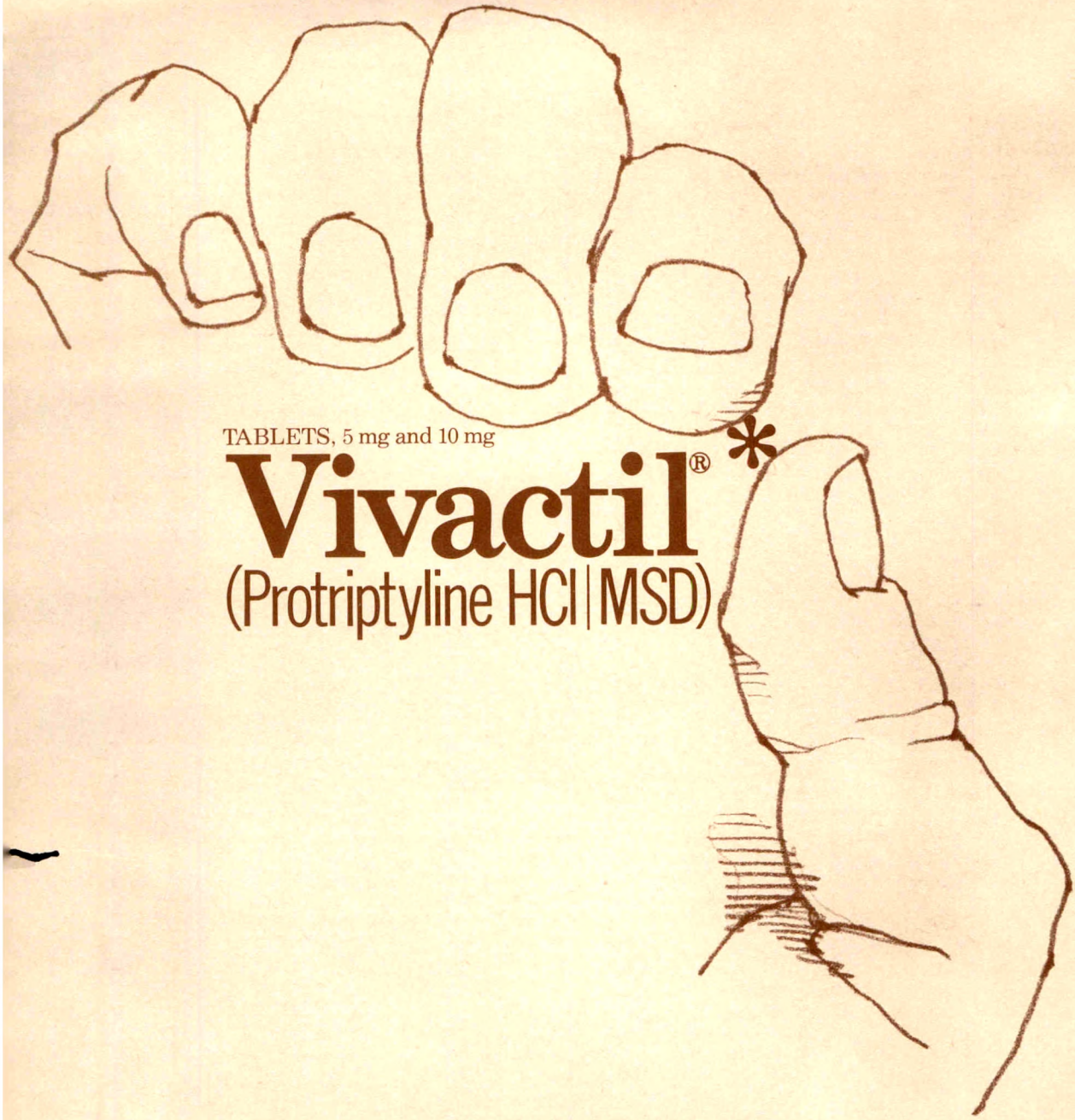
1. Kales A, *et al*: *Arch Gen Psychiatry 23*:226-232, Sep 1970
2. Kales A, *et al*: *Clin Pharmacol Ther 18*:356-363, Sep 1975
3. Dement WC, *et al*: Long-term effectiveness of flurazepam 30 mg *h.s.* on chronic insomniacs. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, Jun 30-Jul 4, 1975

ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

*Significantly increased over baseline placebo ($P < .05$).

In clinically significant depression



TABLETS, 5 mg and 10 mg

Vivactil®*

(Protriptyline HCl | MSD)

When you want an antidepressant that is characteristically nonsedating for the patient under close medical supervision (Symptoms such as anxiety or agitation may be aggravated.)

MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information please see following page.

In clinically significant depression

TABLETS, 5 mg and 10 mg

Vivactil®

(Protriptyline HCl|MSD)

Contraindications: Known hypersensitivity; acute recovery phase following myocardial infarction. Should not be given concomitantly with an MAOI; hyperpyretic crises, severe convulsions, and deaths have occurred in patients receiving tricyclic antidepressant and MAOI drugs simultaneously. When it is desired to substitute protriptyline HCl for an MAOI, a minimum of 14 days should be allowed to elapse after the latter is discontinued. Protriptyline HCl should then be initiated cautiously with gradual increase in dosage until optimum response is achieved.

Warnings: May block the antihypertensive effect of guanethidine or similarly acting compounds. May impair mental and/or physical abilities required for the performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Should be used with caution in patients with a history of seizures and, because of its autonomic activity, in patients with a tendency to urinary retention or increased intraocular tension.

Tachycardia and postural hypotension may occur more frequently than with other antidepressant drugs. Should be used with caution in elderly patients and patients with cardiovascular disorders; such patients should be observed closely because of the tendency of the drug to produce tachycardia, hypotension, arrhythmias, and prolongation of the conduction time. Myocardial infarction and stroke have occurred with drugs of this class. On rare occasions, hyperthyroid patients or those receiving thyroid medication may develop arrhythmias when this drug is given.

Usage in Children: Not recommended for use in children because safety and effectiveness in the pediatric age group have not been established.

Usage in Pregnancy: Safe use in pregnancy and lactation has not been established; therefore, use in pregnant women, nursing mothers, or women who may become pregnant requires that possible benefits be weighed against possible hazards to mother and child.

Precautions: When protriptyline HCl is used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; likewise, in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase; paranoid delusions, with or without associated hostility, may be exaggerated. In any of these circumstances, it may be advisable to reduce the dose of protriptyline HCl or to use a major tranquilizing drug concurrently. Symptoms, such as anxiety or agitation, may be aggravated in overactive or agitated patients.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. May enhance response to alcohol and effects of barbiturates and other CNS depressants. Possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent administration with electroshock therapy may increase hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue drug several days before elective surgery, if possible. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions which have not been reported with this specific drug. However, the pharmacologic similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when protriptyline HCl is administered. Protriptyline HCl is more likely to aggravate agitation and anxiety and produce cardiovascular reactions such as tachycardia and hypotension.

Cardiovascular: hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: confusional states (especially in the elderly) with hallucinations, disorientation, delusions, anxiety, restlessness, agitation; insomnia, panic, and nightmares; hypomania; exacerbation of psychosis.

Neurological: numbness, tingling, and paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns, tinnitus.

Anticholinergic: dry mouth and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilatation of the urinary tract.

Allergic: skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight), edema (general, or of face and tongue), drug fever.

Hematologic: bone marrow depression; agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia.

Gastrointestinal: nausea and vomiting, anorexia, epigastric distress, diarrhea, peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency, nocturia; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache, and malaise.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of other tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets, containing 5 mg and 10 mg protriptyline HCl each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information.

Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

MSD
MERCK SHARP & DOHME

RAVEN PRESS titles in psychiatry

DRUG TREATMENT OF MENTAL DISORDERS

Edited by Lance L. Simpson

This authoritative and readable text considers those drugs used most often and with notable therapeutic success. Within this context, each drug is described in accordance with our current knowledge of its basic and clinical pharmacology, with emphasis placed on those aspects of drug action that have therapeutic significance. Where appropriate, current concepts of the biological basis of mental disorders are discussed. This is a text to be read and reread by students and residents, and to be used for frequent consultation by every prescribing clinician. **336 pages, Library edition: $19.75, Text edition: $13.50 (1976)**

CANCER: THE BEHAVIORAL DIMENSIONS

A National Cancer Institute Monograph

Edited by Joseph W. Cullen, Bernard H. Fox, and Ruby N. Isom

This unique volume identifies and explores the human behavioral components of cancer prevention, detection, diagnosis, treatment, rehabilitation, and continuing care. Chapters are by recognized authorities in oncology, epidemiology, psychiatry, psychology, sociology, social work, public health, nursing, health education, and communications. Comments and insights by cancer patients are an important added feature of the book. **408 pages, $17.50 (1976)**

BIOLOGICAL FOUNDATIONS OF PSYCHIATRY (2 volumes)

Edited by Robert G. Grenell and Sabit Gabay

This authoritative multiauthored set summarizes the current state of our knowledge of the biological bases of mental disorders. It examines the fundamental mechanics of behavior on the basis of the medical model. Major sections of the books are devoted to the genetics of psychiatric disorders, physiology and behavior, drive and motivation, levels of consciousness, biochemical correlates of behavior, psychopharmacology, and the biology of psychosomatic illness. **Volume 1: 614 pages, Volume 2: 478 pages, $35.00 per volume (1976)**

PHARMACOLOGY OF MARIHUANA

Edited by Monique C. Braude and Stephen Szara

This monograph, sponsored by the National Institute on Drug Abuse, is the most complete and up-to-date treatment of the pharmacology of marihuana ever to be released. Outstanding researchers have reviewed the current scientific data on cannabis and its derivatives. The volumes are a basic reference source for experimental and clinical research in the field. **Volume 1: 475 pages, Volume 2: 426 pages, Set price: $50.00 (1976)**

BIOLOGY OF THE MAJOR PSYCHOSES: A Comparative Analysis

Association for Research in Nervous and Mental Disease, Research Publications, Volume 54

Edited by Daniel X. Freedman

This volume integrates recent research in diagnosis and biology, cutting across traditional diagnostic lines, using a comparative approach to determine what can be learned from the clinical phenomena about the meaning of biological measures with respect to etiology, predisposition, clinical state, course, and outcome. **384 pages, $22.50 (1975)**

PSYCHOLOGICAL ASPECTS OF A FIRST PREGNANCY AND EARLY POSTNATAL ADAPTATION

Edited by Pauline M. Shereshefsky and Leon J. Yarrow

"Presents in detail the findings of an intensive multidisciplinary study of 60 young, middle-class American families living in an urban setting. Each family was involved from three months prenatally during the course of their first pregnancy until six months postnatally. . . . The data are here—exhaustively collected, critically analyzed, and highly significant." — MODERN MEDICINE. **391 pages, $15.00 (1973)**

HORMONES, BEHAVIOR, AND PSYCHOPATHOLOGY

Edited by Edward J. Sachar

This study of the interrelationships between psychiatry and endocrinology draws on new techniques in psychologic assessment, endocrine biochemistry, hormonal and neuropharmacologic manipulation, and neurochemical analysis to clarify old problems and to discover previously unsuspected relationships. The results of these studies have important implications for psychiatric diagnosis, and for the strategy of therapeutic intervention. **326 pages, $23.75 (1976)**

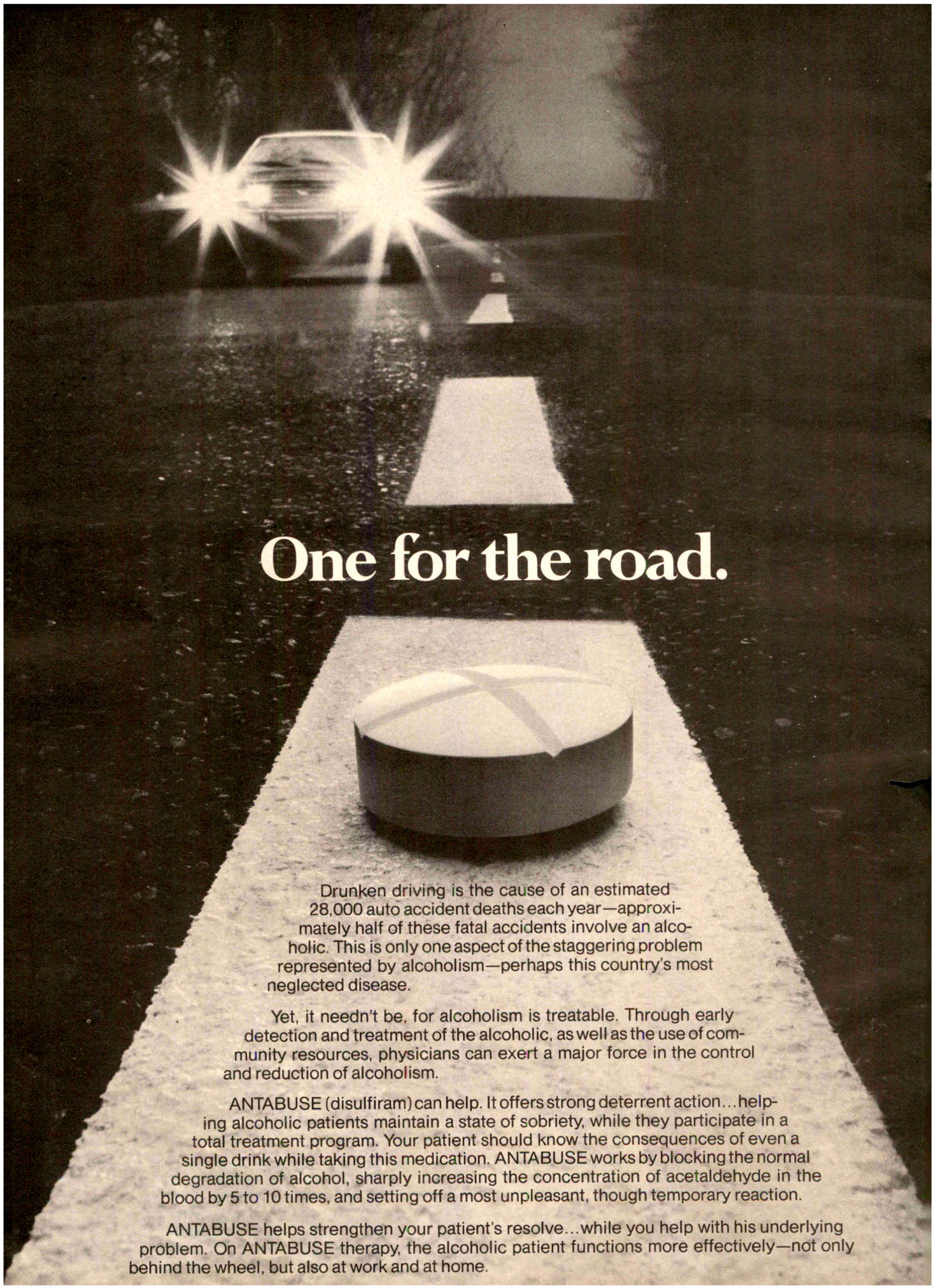
FACTORS IN DEPRESSION

Edited by Nathan S. Kline

"Almost without exception, the papers in this book are comprehensive and thought-provoking articles written by innovators in several major areas of investigation. . . . The authors have a large stake in the work to which they have devoted their lives, and therefore this is also a book of opinions, seldom explicitly stated, about how we should look at depression."—American Journal of Psychiatry. **284 pages, $17.50 (1974)**

Send orders to:

RAVEN PRESS, PUBLISHERS
Dept. JP
1140 Avenue of the Americas
New York, New York 10036 U.S.A.



Drunken driving is the cause of an estimated 28,000 auto accident deaths each year—approximately half of these fatal accidents involve an alcoholic. This is only one aspect of the staggering problem represented by alcoholism—perhaps this country's most neglected disease.

Yet, it needn't be, for alcoholism is treatable. Through early detection and treatment of the alcoholic, as well as the use of community resources, physicians can exert a major force in the control and reduction of alcoholism.

ANTABUSE (disulfiram) can help. It offers strong deterrent action...helping alcoholic patients maintain a state of sobriety, while they participate in a total treatment program. Your patient should know the consequences of even a single drink while taking this medication. ANTABUSE works by blocking the normal degradation of alcohol, sharply increasing the concentration of acetaldehyde in the blood by 5 to 10 times, and setting off a most unpleasant, though temporary reaction.

ANTABUSE helps strengthen your patient's resolve...while you help with his underlying problem. On ANTABUSE therapy, the alcoholic patient functions more effectively—not only behind the wheel, but also at work and at home.

BRIEF SUMMARY
(For full prescribing information, see package circular.)
ANTABUSE® (disulfiram) In Alcoholism
INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)
CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, *e.g.* cough syrups, tonics, and the like, should not be given ANTABUSE.
ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

WARNINGS: ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.
The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.
THE ANTABUSE-ALCOHOL REACTION:
ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.
The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.
The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.
DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.
Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.
It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.
Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.
CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.
USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.
PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)
Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.
Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.
ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)
Optic neuritis, peripheral neuritis, and polyneuritis may occur following administration of ANTABUSE.
Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.
In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.
Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.
One case of cholestatic hepatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.
DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.
INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.
MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.
NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.
DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.
TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, such a test reaction should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.
However, where a test reaction is deemed necessary, the suggested procedure is as follows:
After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (1/2 oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.
MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokalemia has been reported.
HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100.
No. 810—Each tablet (scored) contains 500 mg. disulfiram, in bottles of 50 and 1,000. **7626**

Antabuse®

BRAND OF DISULFIRAM

Pharmacologic Deterrent Therapy
Tablets, 250 mg. and 500 mg.



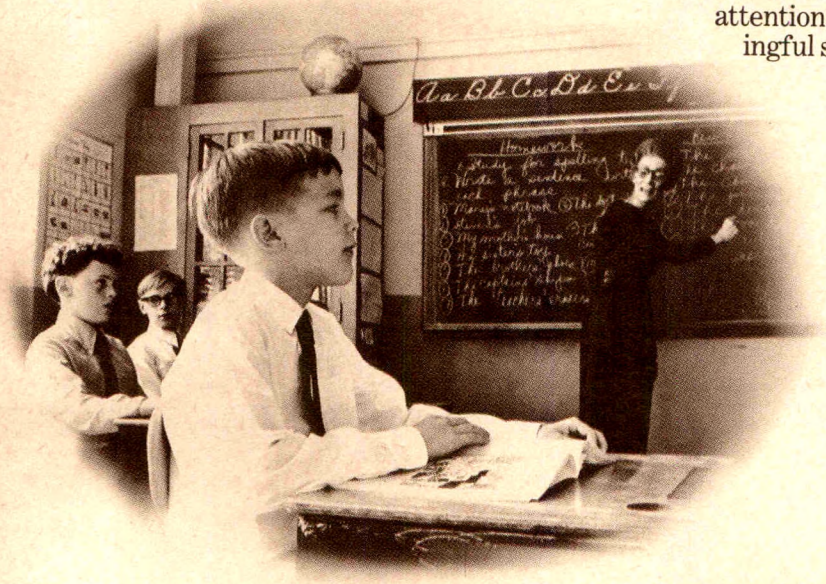
A first step in rehabilitation of the alcoholic

Ayerst®
AYERST LABORATORIES
New York, N.Y. 10017

Tested by time and experience i

1962

"...a considerable decrease of hyperactivity...."[1]
Knobel, 1962



Over a decade of controlled studies and clinical experience has shown the effectiveness of Ritalin in reducing the hyperactivity,[1-3] distractibility,[1,4,5] and disorganized behavior[1-8] in the MBD child.

By lessening the effects of motor and attentional disorders, Ritalin can help the MBD child to better focus his attention on meaningful stimuli and thus can often improve cognition and promote learning.[6,9]

And side effects – insomnia an appetite loss – with Ritalin have occurred less frequently than with dextroamphetamine.[10,11]

Indeed, Ritalin is currently a drug of choice in many MBD situations,[10,12] and can prove to be an important element in many complete remedial programs for MBD.

Therapy with Ritalin should b undertaken only after a medical diagnosis of MBD has been made. Drug treatment is not indicated for all children with MBD.

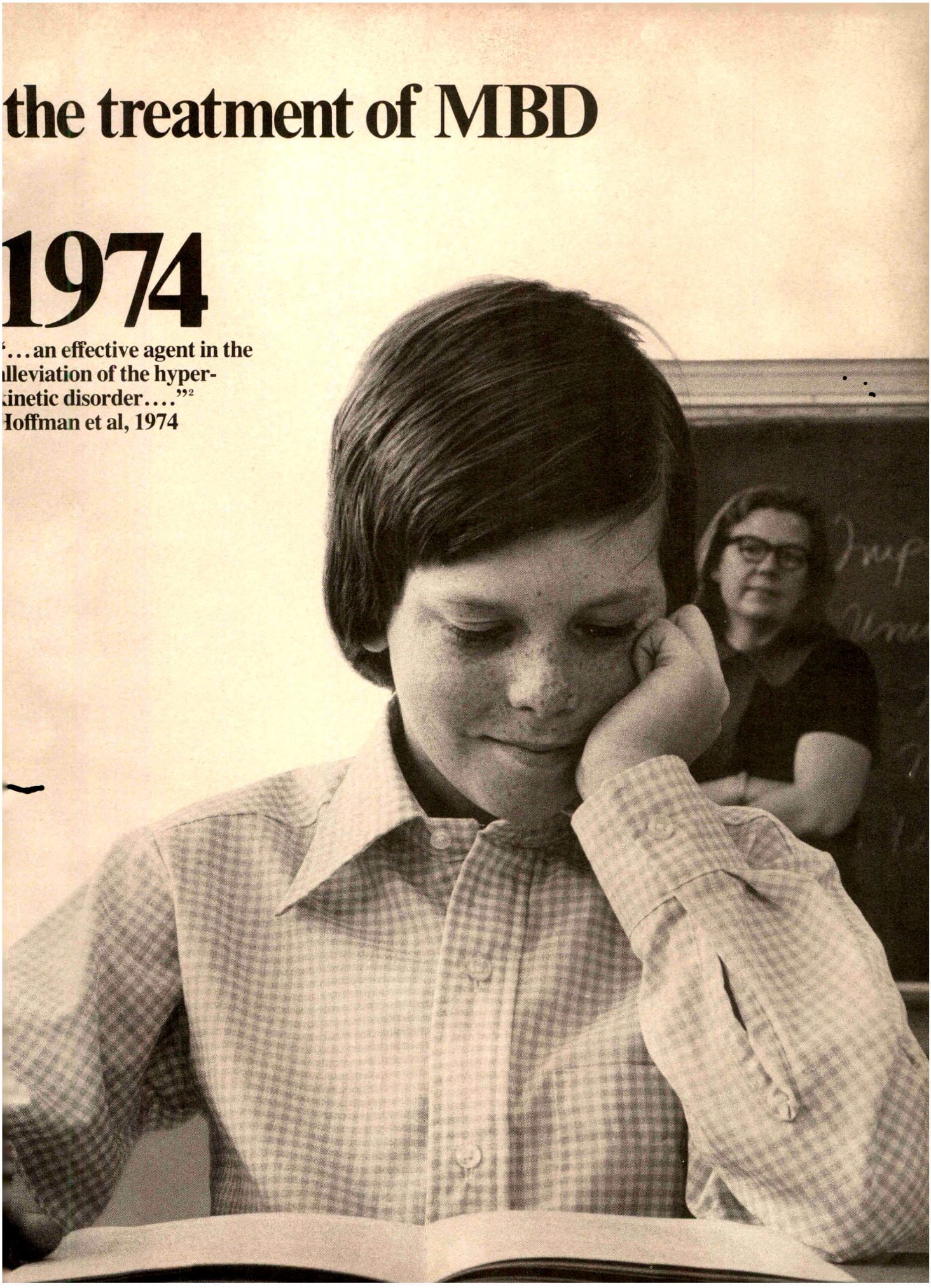
Dosage should be periodically interrupted. Often, these interruptions reveal some "stabilization" in the child's behavior even without medication, permitting a reduction in dosage and eventual discontinuance of drug therapy.

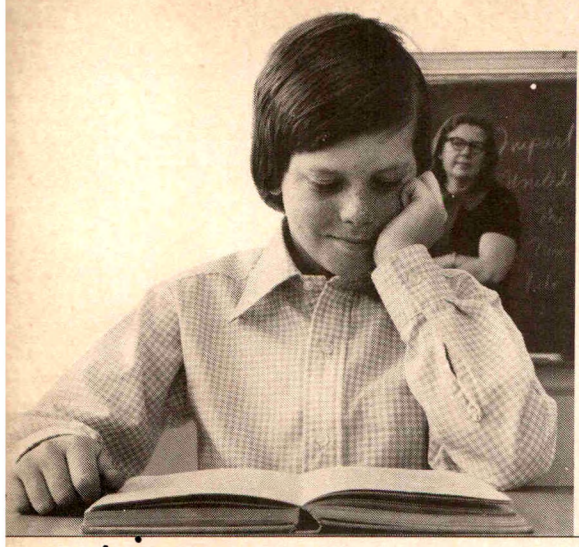
Ritalin®
(methylphenidate)
Only when medication is indicated

the treatment of MBD

1974

'...an effective agent in the
lleviation of the hyper-
kinetic disorder...."[2]
Hoffman et al, 1974





Ritalin®
(methylphenidate)
Only when medication is indicated

Ritalin® hydrochloride ℂ
(methylphenidate hydrochloride)

TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources.

Characteristics commonly reported include: chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; minor neurological signs and abnormal EEG. Learning may or may not be impaired. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis. Appropriate educational placement is essential and psychosocial intervention is generally necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin should not be used in children under six years, since safety and efficacy in this age group have not been established.

Sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available. Although a causal relationship has not been established, suppression of growth (*ie*, weight gain and/or height) has been reported with long-term use of stimulants in children. Therefore, children requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative.

Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary.

Periodic CBC, differential, and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported. Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: leukopenia and/or anemia; a few instances of scalp hair loss.

In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

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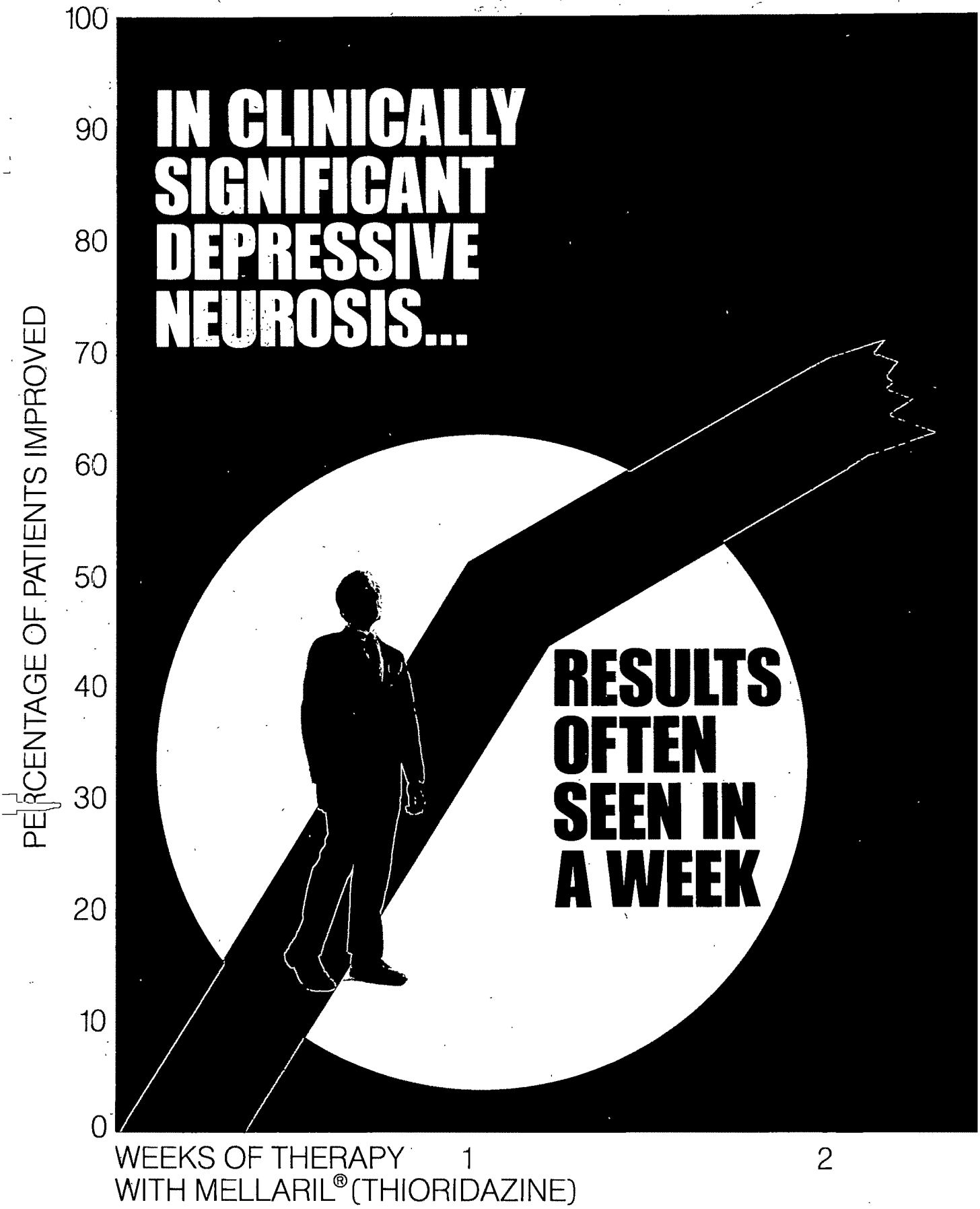


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Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy, observed primarily in patients receiving larger than recommended doses, is characterized by diminution of visual acuity, brownish coloring of vision, and impairment of night vision; the possibility of its occurrence may be reduced by remaining within recommended dosage limits. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; rarely, nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—Rare cases described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia. *Persistent Tardive Dyskinesia*—Persistent and sometimes irreversible tardive dyskinesia, characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and sometimes of extremities may occur on long-term therapy or after discontinuation of therapy, the risk being greater in elderly patients on high-dose therapy, especially females; if symptoms appear, discontinue all antipsychotic agents. Syndrome may be masked if treatment is reinstituted, dosage is increased, or antipsychotic agent is switched. Fine vermicular movements of tongue may be an early sign, and syndrome may not develop if medication is stopped at that time. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea; systemic lupus erythematosus-like syndrome.

Dosage: Dosage must be individualized according to the degree of mental and emotional disturbance, and the smallest effective dosage should be determined for each patient. In adults with depressive neurosis the usual starting dosage is 25 mg t.i.d. and the dosage ranges from 10 mg b.i.d. to q.i.d. in milder cases to 50 mg t.i.d. or q.i.d. for more severely disturbed patients; the total daily dose ranges from 20 mg to a maximum of 200 mg.

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THE AMERICAN JOURNAL OF PSYCHIATRY

Overview: Research on the Psychology of Women. I. Gender Differences and Sexual and Reproductive Life

BY ANNE M. SEIDEN, M.D.

There has been a recent and rapid increase in research literature pertaining to women; this revolution in women's studies may be currently unequaled in any other field related to psychiatry. In this first part of a two-part article the author briefly discusses the social and intellectual contexts of research in this area. She reviews recent research on gender differences in behavior and on women's sexual and reproductive lives, including various aspects of the menstrual cycle, menopause, diseases of the reproductive organs, coitus, rape, childbirth, lactation, and fertility control. The second part will cover research on women in families, communities, work, and psychotherapy; and it will attempt to assess limitations of present knowledge and the anticipated directions and impact of future research.

> That is all I had to say to you about femininity. It is certainly incomplete and fragmentary and does not always sound friendly. But do not forget that I have only been describing women in so far as their nature is determined by their sexual function. It is true that influence extends very far; but we do not overlook the fact that an individual woman may be a human being in other respects as well. If you want to know more about femininity, enquire from your own experiences of life, or turn to the poets, or wait until science can give you deeper and more coherent information. (p. 135)
>
> —SIGMUND FREUD (1)

RESEARCH IN THE AREA that is now identified as "women's studies" has expanded exponentially over the past decade. Cutting across the social sciences, the humanities, and the biomedical sciences, the field of women's studies has characteristics of both an academic discipline and a social movement. This review will emphasize research within the fields of psychology and psychiatry and, to a certain extent, sociology and physiology. However, it is critical to note that much of the current research is being stimulated, conducted, funded, evaluated, and disseminated within the context of the broader interdisciplinary field of women's studies. The social and political, as well as the scientific, context of this field is important in both the production and the understanding of the research.

The recent knowledge explosion in women's studies is probably unequaled in any other discipline related to psychiatry. The term itself, "women's studies," was apparently first used about 1969 (2). In 1969 there were 2 university women's studies programs. By 1974, 900 institutions and 4,224 individuals were offering 4,658 courses in this area, with formal programs (one-third of them degree-granting) in 112 institutions (3, pp. vi–ix; 4). Nine volumes of synopses of women's studies courses have been published by KNOW, Inc. (5), and the Feminist Press (6). The latter maintains a clearinghouse on women's studies and publishes both a *Women's Studies Newsletter* and a guide to courses, programs, and teachers (3). Representative scholarly journals in this area include *Feminist Studies, Women's Studies, Sex Roles, Journal of the Psychology of Women, Journal of Women and Health*, and *Signs: Journal of Women in Culture and Society*. A number of standard professional journals, in or pertinent to the field of psychiatry, have recently included special issues or

This paper was written at the invitation of the Editor.

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special sections on women's issues within their disciplines (7–12).

There has been sufficient publication in this area to justify the existence, since 1972, of two separate bibliographical periodicals, *Women's Studies Abstracts* and the *Canadian Newsletter of Research on Women* (which emphasizes non-U.S. sources). A number of annotated bibliographies have been published in specific areas related to women's issues, such as health, education, and mental health, including two research bibliographies from the National Institute of Mental Health (13, 14), one from the American Psychological Association (15), and a general one by Davis (16). Hochschild (17) reviewed the literature on sex roles and Long-Laws (18) the marital therapy literature, from a feminist perspective. In 1974 Eichler (19) published an annotated bibliography of bibliographies on women, and Astin and associates (20) added one on education and career issues. Daniels (21), commissioned by the Association of American Colleges' Project on the Status and Education of Women, surveyed existing research findings, persistent research questions, and sources for keeping up with this expanded flow of research.

In 1975 the *Annual Review of Psychology* for the first time included a section on the psychology of women (22). In contrast, Tennov (23) noted that of 35 introductory texts in social psychology published between 1940 and 1970, only 1 had a chapter concerning women.

More recently, several major texts on the psychology of women have appeared (24, 25), as well as several collections of readings suitable for textbook use (26–29). Earlier, but still classics, are Morgan's collection (30), which contains a number of important scientific as well as general articles, and Cade's collection of work on black women (31). Also important are several histories of the current women's movement (32), of male and female sex roles (33–35), and three archival collections of important historical documents (36–38). Two histories of childhood (39, 40) and one collection of archival sources on childhood (41) also contain historical research pertinent to women.

It is of interest that relatively little of this knowledge has thus far been directly incorporated into psychiatric teaching programs. In a 1973 survey, the American Psychiatric Association's Task Force on Women found that only 26 of the 167 residency programs responding offered course work in the psychology of women, sex roles, or related topics (less than the number offering courses dealing with ethnic minorities); most of these courses were elective rather than required (42). Major textbooks on psychiatry have not dealt extensively with the women's movement or with women's studies as such (although the current second editions of the books by Freedman and associates [43] and Arieti [44] are exceptions). While the 1974 examinations of the American Board of Psychiatry and Neurology and the APA's 1972 Psychiatric Knowledge and Skills Self-Assessment Program included a number of questions related to other social psychiatry issues, they did not examine in this area.

Clearly, the very newness of much of the work in this area accounts for its present relative absence from psychiatric curricula. Time is required for new research to be read, replicated, critically reviewed, and assimilated. When in addition the area in question is one that is as personally and professionally heavily loaded as this one, there may be some sources of caution or resistance that further delay the process. A psychiatrist's views of what women are or ought to be are rather obviously likely to have a more profound effect on one's personal life and world view than, for example, a double-blind study comparing the effects of two different neuroleptic agents. We bring our hopes and fears in this area to our design and evaluation of research results as surely as we do to our clinical work. Roeske's review of women in psychiatry (45) highlighted how often the psychiatric implications of gender issues have been handled by denial in clinical and training situations. That same denial may bias research by affecting the choice of research topics or subjects, the ways in which questions are asked, and the ways in which data are interpreted. Methodological problems are many and sometimes complex.

Nevertheless, there already exists a considerable body of new research that is of great importance to psychiatry. This overview will highlight major findings in selected aspects of this large area and will conclude with an assessment of the impact and limitations of the data and their present and future importance to psychiatry.[1]

RESEARCH ON SEX DIFFERENCES

A vast amount of research has been conducted in an attempt to determine the nature and extent of sex differences. Much of this work has been carefully reviewed in a major book by Maccoby and Jacklin (48); their annotated bibliography cites approximately 1,500 studies appearing between 1966 and 1973 alone. Earlier studies in this area were reviewed by Mac-

[1]Conceptually parallel to the growth of women's studies is the more recently developing field of men's studies, properly the subject of another overview article. As with women's studies, it is both an academic research field and a social movement. As the latter it seeks to counteract aspects of male gender role that seem to be associated with considerable, even lethal, consequences for the individual or society. As a research field it has many of the goals of women's studies—to correct prior research biases by treating male human behavior as a subject of inquiry in its own right, separate from the assumption that male behavior is more "representative" or "normative" for humans than female behavior.

Currently, there are far fewer courses and publications in this area, but the number appears to be growing. Representative books include Filene's (33) from a historical perspective, Pleck and Sawyer's (46) from a social science background, and Farrel's (47) for general readers. A *Men's Awareness Network Newsletter* is published by the Knoxville, Tenn., Men's Resource Center and cites scholarly and social resources. In 1975 it listed five college courses on men or male roles, one men's studies program in a "free college," and one major bibliographical collection (the Men's Studies Collection in the Charles Hayden Library of the Massachusetts Institute of Technology).

coby (49), Sherman (24), Bardwick (25), and Garai and Scheinfeld (50). Clearly, the area of sex differences has attracted considerable research attention.

In principle, sex differences could arise from at least the following sources:

1. Intrinsic biological differences that are present from birth or a relatively early age.
2. Purely cultural differences in roles assigned to the sexes.
3. Anticipatory socialization, which is cultural at the time it is taught to the child but is preparatory for genuine biological differences that will not become apparent until a later age (e.g., childhood socialization for, or against, the adult experiences of childbirth and child nurture).
4. Differential value, meaning, or reward assigned by the culture to the gender-specific behaviors from sources 1, 2, and 3, causing certain types of behavior to be more strongly reinforced in a gender-specific way.
5. Further cultural elaboration of behaviors that predictably emerge as part of reactions to the more basic sources listed previously. For example, if women are differentially socialized against *direct* expression of sexuality or aggression, an elaborate secondary repertoire of *indirect* expression, sometimes called manipulation, is required.

Despite the theoretical importance of intrinsic biological differences and the considerable belief in them on a folk-wisdom basis, it is easier to demonstrate *belief* in these differences than the differences themselves. One study (51) found that fathers described their newborn daughters as "delicate" and their sons as "strong" before they had seen the children. Another study (52) found that mothers played differently with and observed different attributes in a strange child, depending on whether the child had been introduced as "Beth" or "Adam." While such beliefs can clearly become self-fulfilling prophecies, to what extent do they also rest on innate biological differences?

The difficulty is partly methodological; one cannot experimentally raise an otherwise normal human in a culture-free environment. But it is also substantive; the plasticity of human behavior is such that many biological differences can be overcome by learning. And the variability of human behavior is such that there is considerable overlap between the sexes on almost any variable chosen for comparison, with considerably more variation within than between the sexes.

Maccoby and Jacklin (48) summarized sex differences that they feel are fairly well established at this time. They are as follows:

1. Girls have, on the average, greater verbal ability than boys *after* about age 11, as measured by tasks involving both receptive and productive language. This is true for both "high-level" verbal tasks (e.g., analogies, comprehension of difficult written material, and creative writing) and "lower-level" ones (e.g., fluency).
2. Boys have, on the average, greater visual-spatial and mathematical ability beginning at about ages 12–13 and increasing through the high school years. There is some evidence that a recessive sex-linked gene contributes to greater than average spatial ability in approximately 50% of all men and 25% of all women, which of course raises the average scores for males.

Both of these sex differences begin to emerge around the time of pubertal changes, but the evidence that biological factors are contributory is stronger for visual-spatial than verbal abilities. Sex differences in mathematical abilities vary greatly among populations, probably depending somewhat on the measures that are used (with mathematical problems involving spatial concepts giving an advantage to the greater number of boys with greater spatial abilities).

3. Males are more "aggressive," with sex differences appearing as early as social play does (ages 2–2½) and appearing in both physical and verbal, direct and attenuated forms of aggression. The meaning of "aggression" is complex and will be discussed later.

Maccoby and Jacklin regarded the following as *unfounded* beliefs about sex differences: that girls are more socially oriented than boys, more suggestible, more auditory, less visual, less analytic but better at rote learning, and lower in self-esteem and achievement motivation.

They regarded the following as areas open to question because of insufficient evidence or ambiguous findings: sex differences in tactile sensitivity, fear, timidity, anxiety, activity level, competitiveness, dominance, compliance, nurturance, and "maternal" (or parenting) behavior.

The activity-passivity dimension does not appear to differentiate the sexes unless one 1) confuses activity with aggression or 2) regards activity as masculine and passivity as feminine by definition, in which case the reasoning is circular. The confusion of activity with aggression arises in part because many measures of activity occur in situations that are also likely to arouse aggression.

If aggression is defined as "the intent of one individual to hurt another, either as such or as part of an attempt to control another for other ends (by use of fear)," it does persistently appear more commonly in males. This shows up cross-culturally and in different age ranges, although most of the studies Maccoby and Jacklin reviewed were laboratory studies done with young children. It was noted that mothers use more physical punishment (itself an aggressive act by this definition) with boys than girls, possibly setting up a circular process where aggression reinforces aggression. Where this process starts is uncertain, although Maccoby and Jacklin lean toward a biological explanation.

Maccoby and Jacklin (48, p. 371) suggested that a major effect of differences in aggressiveness on vocational choice may come about by default because "women, being slower to anger, are less likely to protest onerous assignments . . . to put the matter bluntly, they are easier to exploit" and therefore may

accept less desirable vocational options.

Whatever the ultimate source, the present sex differences in aggression appear to be considerable, and there may be implications in this fact for social issues. Evidence from other sources (53, 54) indicates that some of the differences may be disappearing, with apparent increases in women of some forms of aggression, such as crimes of violence. It is possible that this kind of change, however much viewed with alarm, may have its positive aspects. The history of occupational sociology tells us that as formerly male occupations become increasingly occupied by women (e.g., schoolteachers, bank tellers), they increasingly lose their attractiveness for men. It is in fantasy conceivable that the entry of larger numbers of adolescent and young adult women into the "field" of criminal violence might in part decrease its attractiveness as an arena for "proof" of masculinity.

With reference to child rearing, animal and cross-cultural work suggested to Maccoby and Jacklin that there may be some danger to children from untamed male aggression, but "that boys who have been involved in caring for younger siblings were less aggressive with age mates as well—i.e., . . . the process of caring for children at least on a part time basis can moderate aggressive tendencies" (48, p. 372). Discussing sex role traits, these authors made the obvious point that effectiveness as a husband and father can well be diminished by a machismo role, while "training a girl to be feminine" in the traditional nonassertive "helpless" and self-deprecatory sense may actually make her a worse mother. They concluded with the hopeful note that a society might "devote its energies more toward moderating male aggression, or toward encouraging rather than discouraging male nurturance activities" (p. 374), a conclusion also voiced by Eisenberg in a paper directed at pediatricians (55).

The generalizability of the work reviewed by Maccoby and Jacklin is significantly limited by the ages of the populations studied and the nature of behaviors observed. Guided by developmental theory, psychoanalytic or otherwise, the vast majority of the studies were done on children, often very young children; only a handful were done on adults. Yet the review shows that the most stable sex differences appear *after* puberty. In a recent review of current work in child development Baer and Wright (56) discussed the implications of reinforcement models (or social learning theory) as opposed to classical developmental models; the former imply relatively greater plasticity of behavior *if* the reinforcement conditions change, while the latter imply something close to the concept of "critical periods" for acquiring behaviors such as those which constitute sex differences.

The rapidly expanding literature that explores the role of sex differences in the vicissitudes of achievement motivation essentially began with the work of Horner (57, 58). She did indeed find sex differences in late adolescents and adults, contrary to the findings for younger subjects summarized by Maccoby and Jacklin; it appears likely that reinforcement conditions of adolescent or adult life may account in large part for differences that apparently emerge after childhood. (Research on adult social roles will be further discussed in the second part of this overview.)

On the other hand, a now considerable body of clinical research on patients suffering from gender dysphorias, gender misdiagnoses, or gender changes intriguingly appears to require both developmental and reinforcement models. For example, the work of Money and Ehrhardt (59) and Stoller (60) suggests that there may be something like a critical period for the development of core gender identity (i.e., one's sense of "I am female" or "I am male"). Even when based on anatomical misdiagnosis that could be corrected, gender *identity* is presently found to be virtually irreversible after early childhood.

On the other hand, the content of gender *roles* (sex-typed behaviors) appears to be heavily based on social learning. Males who are reared as females or made to appear female can assume female role behavior convincingly enough to satisfy the average observer if certain conditions are met. These conditions ordinarily appear to include having a female gender identity fixed before a relatively critical age. The same is true for females reared as males, but it is of interest that the applications for male-to-female sex change far outnumber the applications for female-to-male change. It is not known to what extent this reflects the greater technical success of the male-to-female operation, the fact that female preponderance in child rearing makes male infants more likely to develop a female identification than are females to develop a male identification, or the possibility that the socially defined male gender role is in fact less stable, less biologically "given" and therefore "natural" and more "cultural" and ambiguous, thus more vulnerable to gender dysphoria (61).

Psychoanalytic developmental theory places heavy emphasis on the child's perception of sex and gender differences and the implications of traumatic awareness of these differences for later personality development. However, examination of female sexuality and personality is a particularly weak area in classical psychoanalytic theory, as noted by Freud (1) and Jones (62). A recent review by a noted psychoanalytic theoretician (63) concluded that "Freud's generalizations concerning girls and women do injustice to both his psychoanalytic method and his clinical findings," particularly in such essentials as equating femininity and passivity. It is of interest that in 1905 Freud published both "Three Essays on the Theory of Sexuality" (64) and the next to last case study of a woman to be included in the standard edition of his psychological work (65), although most of his case studies of men were published thereafter. In other words, his later and therefore presumably more mature theoretical thinking as applied to his own clinical work with women was not made available for review as published, detailed, clinical treatment studies.

Much of the earlier psychiatric thinking on gender

differences and identification, particularly as subjectively experienced, derives from clinical psychoanalytic studies of adult patients. The methodological problems are obvious but are not easily solved. Adults may remember poorly, but small children verbalize poorly and adult observers may easily deny, distort, or exaggerate children's sexuality (as Freud [64] observed) or inaccurately project their own feelings and experience into their observations.

There is currently a keen psychoanalytic interest in gender difference issues in general, as well as female sexuality. There have been panels on aspects of female sexuality at virtually all of the recent psychoanalytic meetings. Unfortunately, most of this work lies outside the scope of this paper, since much of it is as yet unpublished and most of it is clinical or theoretical rather than research. An exception is the work of Roiphe and Galenson (66, 67). Based on observations of infants in nurseries and on parents' reports, they have demonstrated that awareness of gender differences regularly occurs by 18 months (much earlier than classical psychoanalytic theory postulated). In their samples this awareness did tend to be somewhat traumatic, but more than a transient difficulty in assimilating it appeared to be associated with prior experiences likely to have damaged object relations or the sense of bodily integrity (such as nongenital as well as genital surgery).

RESEARCH ON SEXUAL AND REPRODUCTIVE LIFE

The Menstrual Cycle

Menarche probably marks a more clear-cut landmark in pubertal development than any single event in the adolescence of boys. The overwhelming majority of women of all ages can remember with precision the age and circumstances during which the first bleeding occurred. There is an enormous variation, of course, in the amount of intellectual understanding, anticipation, surprise, pain, affective change, and indeed the amount and regularity of bleeding that occurs with first periods. We are just beginning to get prospective data on samples of normal young women. One study (68) reported that some women have a sobering or even depressive response to first periods and begin to experience their lives as more serious or more restricted. Earlier studies (e.g., references 69–71) were based on retrospective data from adults but appear to provide general agreement.

Although menarche is a life event that could well be examined within the framework of crisis theory, and is marked by elaborate rituals in some primitive societies, our society pays relatively little public attention to it either ceremonially or in the scientific and general literature. Hygiene books for grade-school children generally omit references to menstruation. Special booklets and films provided by manufacturers of sanitary products attempt to fill this gap, with some serious omissions noted by Whisnant and associates (72).

Somewhat more data are available on the biopsychological and behavioral effects of cyclicity as such (73–83). However, work in this area must be appraised with caution. The actual biological events are covered with considerable psychological and interpersonal overlay, and there are very real consequences in individuals' lives from the hasty acceptance of overgeneralized data. The fact that some women have severe premenstrual or menstrual incapacity and others do not has been used paradoxically both 1) to dismiss the seriousness or validity of the complaints of those who do have the syndrome, and 2) to assume erroneously that if some have it, all do. For example, one politically prominent physician was willing to officially state his belief that menstrual and menopausal syndromes made women as a group unfit for political office (84). By contrast, those women who do experience severe symptoms may have difficulty obtaining indicated medical treatment for this "psychogenic" malady (85).

Effects of the menstrual cycle. With these caveats in mind, what data are currently available about the effects of the menstrual cycle? A number of studies (73–76, 81–83) appear to show increases in certain affects (i.e., libido, irritability, anger, anxiety, and/or depression) in some women during the premenstrual and menstrual phases of the cycle and corresponding decreases in the same affects at other phases. This may be manifested in such diverse measures as self-reported affects, dream content, waking fantasies, and overt behaviors including increased accidents, committing violent crimes, and more frequently bringing one's children to emergency rooms for minor illnesses. Some studies show increased and some decreased libido (73, 74).

The proportion of women reporting any of these effects varies among studies but averages about 50% (this average is undoubtedly somewhat inflated by the fact that studies showing negative effects are less likely to be published). In one series of prospective studies (75, 76), women who on entering college reported severe menstrual distress turned out to have lower grade-point averages and a greater probability of diagnosis of affective disorder, suggesting the possibility that bipolar affective disorder in women may initially present as menstrual distress. However, in a nonclinical population Sommer (77) failed to find any evidence of intellectual or performance changes with the cycle.

Methodological problems in this area are many. It is obvious that a woman's own expectations about menstruation (and possibly those of her family, friends, or sexual partners) could override purely hormonal factors. Indeed, Paige (78) found that reported menstrual distress varied with both the subject's religion and the actual amount of bleeding (itself dependent on hormonal manipulation). Koeske (79) showed that vignettes describing angry behavior by women were attributed by college student judges to environmental events unless the vignette included the information that the sub-

ject was in a premenstrual or menstrual phase, in which case the same behavior was attributed to menstrual-related tension. Parlee (80) has reexamined Dalton's data (74) showing poorer examination performance by menstruating students. The same data also provided evidence for delayed menstruation in a portion of the sample. Cycle variability is considerable, and stress can delay or accelerate ovulation and menstruation. Therefore it is possible that prolonged stressful situations, culminating in attempted suicide, violent crimes, or poor examination performance, and then a period, could sometimes represent "tension-delayed menstruation" instead of "premenstrual tension" (80).

Surprisingly, after all these centuries of human menstruation, we still do not have definitive data on the subject. It is intriguing, however, as Parlee (81) noted, that most researchers attribute behavioral or affective changes associated with the menstrual cycle to hormonal factors, but are more likely to attribute emotional changes during pregnancy to the woman's life situation or intrapsychic conflicts about motherhood, despite the fact that there are considerably greater hormonal changes associated with pregnancy.

More research in this area is clearly needed. At the present, reviews by Parlee (81), Melges and Hamburg (82), and Dalton (74), and Weideger's book for general readers (83) seem to provide the best coverage of the topic.

Effects of other types of cyclicity. While the greater visibility of cyclical changes in menstruating women has attracted more study, researchers are beginning to study the effects of cyclicity in hysterectomized women who retain their ovaries and in men (86, 87). Testosterone levels in men do vary with time, with access to sexual opportunities, and apparently on occasion with the menstrual cycle of the usual sexual partner. In rhesus monkeys, testosterone levels can be experimentally manipulated by artificially changing the male's access to estrous females or his dominance position vis-à-vis other males (88). Other studies of women have shown greater affective and behavioral fluctuation with the weekly cycle (work week versus weekends) than with the menstrual cycle (e.g., reference 89); diurnal cycles are important in affecting hormonal and affective changes in men and women. The whole topic will be more comprehensively dealt with when it can be brought together with the growing literature on circadian and ultradian rhythms in general.

Menopause

Menopause is a distinctly human characteristic. In most other mammals, the sexes do not differ greatly in their capacity for maintaining fertility up to advanced old age. The biological adaptive value would appear to be related to other distinctive human characteristics such as the prolonged period of childhood dependency, with complex care-taking behaviors that in the human are not fixed action patterns but must be learned. The existence of menopause assures that an average healthy woman will have many years of vigor and good health following the birth of her youngest child. This freedom from new pregnancies permits more extended child rearing as well as participation in a number of teaching, care-taking, and leadership functions. Selective pressures clearly appear to have favored those of our ancestors whose females had menopause over those who did not. Thus it is particularly ironic that the medical and psychiatric literature on menopause, as reviewed by Osofsky and Seidenberg (90), tends to view it as "a time of mortification, with service to the species over."

Symptoms of menopause. Symptoms attributed to the menopausal phase itself include vasomotor instability (hot flashes, night sweats) and emotional difficulties (irritability, anxiety, depression, insomnia, etc.). Symptoms attributed to the postmenopausal phase have included estrogen deficiency syndromes (vaginal mucosal thinning) and emotional difficulties, predominantly depression, with impaired self-esteem. Interestingly, we do not have generalizable data on the prevalence of these symptoms in the population at risk. One review (91) suggested that the vasomotor symptoms are more frequent in women of menopausal age than other ages, but emotional symptoms are not.

As with menstrual symptoms, there has been a paradoxical tendency to assume that if some women have severe or troublesome symptoms, all must, and conversely, to either provide inadequate treatment for the presumed "psychogenic" symptoms of those who do or prescribe unnecessary (and apparently carcinogenic) (92) estrogens even when symptoms are mild or unrelated to estrogen deficiency.

Thus far there appears to be a relative neglect of the effects of the menopause (and its anticipation) in much of the recent work on psychology of women. A number of relatively comprehensive books on women (e.g., reference 24) and sex differences (28, 48, 59, 93) do not deal with it at all, despite the fact that the relatively early end of female versus male fertility is one of the more striking sex differences in humans.

Social factors. Standard texts do not appear to include many references to cross-cultural work bearing on the important question of the extent to which menopausal symptoms are prominent in cultures in which women's social power and influence rise rather than decline with age. In any society menopausal phenomena are inevitably intertwined with other aspects of beginning middle age. Women are more likely to be widowed than are men, and if this occurs they have less chance of remarriage, a salient difference in a social structure primarily organized around the heterosexual pair bond. At about the same time as the menopausal years, many women are dealing simultaneously with the departure of children from the home, the entry of the husband (who is likely to be several years older) into the years of preretirement, and the risk of middle-age depression and even death. These factors merit study in relation to the emotional difficulties reported by some women at these ages. Social factors seem to

be at least as important as biological ones at this point. For example, the factors predictive of an active sexual life in older age groups have emerged as general good health, prior active sex life, and the availability of an interested and interesting partner (94).

Diseases of the Reproductive Organs

An aspect of body image with an important effect on the psychology of both sexes is the potential for life-threatening or life-disrupting diseases of the reproductive organs, particularly when those diseases are mysterious or related to sexual activity or both. Thus syphilophobia was apparently a far more common clinical entity when the natural history of syphilis was less well understood and its treatment less effective than they are today.

The internal position of most of the genital organs in women is generally believed to contribute to women's sexuality being perceived as more mysterious by both women and men; but for women this poses a body image problem as well. If the organs cannot be seen, their very existence and certainly their healthy functioning cannot be verified except by inference; Barnett (95) found evidence of a body-image scotoma in girls including the vagina itself and the organs within, and Whisnant and associates (72) found that adolescent girls still had extremely vague notions of just what was supposed to be where, even after receiving instruction on the subject.

Yet women who have received reasonably adequate health education (and women's magazines contain a great deal more of this than men's do) have been told of the risks of having cervical and uterine cancer and asymptomatic venereal infections: these risky conditions can only be detected by having someone else examine the woman's body and do appropriate tests. While the woman is assured that she should examine her own breasts for lumps, she is reminded that only a physician can tell if they are benign. Thus her appropriate health education, if carried out well, must inform her of the risk that these parts of her body can, as it were, turn against her in a malignant way. Whereas in past years a woman's potential fear that her own body might kill her may have been more closely associated with a fear of obstetrical catastrophes, in contemporary life the risk of death from breast or genital cancer is relatively much greater.

Like so much about women's biology, these risks are currently both overreacted to and underreacted to. That they nevertheless play an important role in women's psychology seems likely. It is quite possible that a vaguely defined fear of death or disease from genital organs has contributed to women's willingness to undergo hysterectomies far more often than is generally believed necessary. Indeed, the word itself may favor such treatment; excessive concern with ill-defined body complaints is more likely to be called "hysteria" in women, whereas comparable symptoms in men are more likely to be called "hypochondriasis" (referring literally to chest pain). On the other hand, the average adult patient visiting any physician's office with almost any complaint is likely to have the heart and lungs examined (thus detecting evidence of the prime killers of middle-aged men), while the average woman, unless coming with specific complaints related to these systems, is much less likely to receive thorough breast and pelvic examinations (which might detect the prime killers of middle-aged women).

There do not seem to have been any studies of the actual prevalence of fears of one's own body among nonclinical populations of women and men. Such studies would be difficult, if one postulates that displacement of such fears onto symptoms such as backache occurs to an unknown degree. However, there have been a moderate number of studies in recent years on the psychological effects of breast and genital surgery on women (e.g., 96). Most of them have dealt with the effects of surgery for malignancies and thus do not add to our knowledge of the effects of loss of specifically female body parts per se, apart from the frequently associated fear of death from malignancy.

Coitus

The psychology of coital behavior has recently received more clinical and research attention than many other aspects of female psychology. Much of the current thinking and research in this area appears to be a rediscovery of knowledge that was temporarily lost. Late Victorian medical and popular writers have been quoted as believing that "normal" women do not enjoy sexual intercourse, but early Victorian and earlier writers did not share this belief (97). Clitoral anatomy and orgasm were accurately described by early Victorian medical writers (98), who also advocated early marriage, since they believed that women's sexual needs were very strong and if denied might lead to hysteria or other untoward consequences.

Late Victorian and even recent medical writers have tended to define healthy female sexuality primarily in terms of its adaptiveness to male sexual needs (8, 97, 99). Indeed, a fairly recent review of the discussion of female sexuality in gynecology textbooks (8, pp. 283–288) uncovered such remarkable statements as "if a woman after a year of marriage is not able to adapt her sexual needs to those of her husband, medical attention is indicated." The clitoral-vaginal orgasm pseudocontroversy appears to be an example of the same thing. Masters and Johnson (100) have described the physiology of female orgasm, as did Kinsey and associates (101) and early Victorian writers (98).

Clitoral or vaginal stimulation (and occasionally fantasy or breast stimulation) can all evoke orgasm; there are differences in stimulation but not in the physiology of the orgasm itself. Women may subjectively experience clear differences between "little" orgasms (more accurately, relaxation from peak excitement without orgasm proper, which is perhaps analogous to satisfactory intercourse without ejaculation, as is common in older men) and "big" orgasms (or orgasm proper, ac-

companied by spasm of the pubococcygeal muscles). This spasm is perceived vaginally if it is differentiated from the total experience, regardless of whether the evoking stimulation was clitoral or vaginal (102). The spasm may be more intense with clitoral stimulation (100), but it may be more consciously perceived if vaginal stimulation focuses attention on that area. The psychological difference between clitoral and vaginal stimulation clearly has much to do with the fact that an adequate male partner is more often associated with the latter. Whatever the locus of the tactile stimulation, the interpersonal and fantasy aspects of the situation heavily color the woman's subjective experience.

Freud (1) believed that lesser "maturity" was likely to be associated with a preference for clitoral stimulation. In those cases where this is true, such preference might rest on the fact that a woman may need greater maturity and skill in order to effectively communicate her sexual needs to a male partner than to fill them herself. Indeed, contemporary sex therapy approaches as reviewed, for example, by Kaplan (103), tend to emphasize helping both partners to communicate their sensual and sexual feelings and encouraging conditions that are favorable for evoking female orgasm in coitus (such as adequate foreplay, freedom to use the female superior position, an unhurried atmosphere, deconditioning of premature ejaculation, and verbal and nonverbal communication).

There are some interesting differences in the kinds of sex therapy that have been advocated for the two sexes. While most sex therapists today feel strongly that the best results are obtained from working conjointly with a committed couple, it seemed natural to Masters and Johnson to provide surrogate partners for men who lacked a partner willing to participate (104). Medicolegal problems, rather than purely therapeutic ones, forced the abandonment of this program. On the other hand, approaches directed at treating the preorgasmic woman without a participant partner have tended to emphasize a method of teaching her to masturbate to orgasm by means of deconditioning, "permission-giving," sensory awareness, and encouragement (102, 105). The rationale here is to increase her sexual activity and autonomy; she can hardly be expected to communicate her sexual needs and wishes to a partner if she does not know them from her own experience, and she cannot easily be sexually effective if she believes female sexuality to be a passive experience. The fact that most studies have shown that far fewer women than men spontaneously masturbate during adolescence (e.g., reference 101) appears to be consistent with the need for this approach. It is interesting to note that women who go on to high intellectual achievement are more likely to have had active masturbatory lives in adolescence (106).

Sexual dysfunction is said to be extremely common among American couples; Masters and Johnson (104) estimated that up to 50% of all couples are sexually dysfunctional. While no recent and representative large-scale surveys seem to bear directly on this point, it appears that sexual difficulties are common among college populations and that students seeking help at college mental health services do not necessarily voice their difficulties in this area unless they are specifically asked about it (107).

Rape

Forced coitus, that is, rape, is a distinctively human capacity. The recent increase in awareness of psychological consequences of rape or fear of rape has led to a rapidly developing area of psychiatric, sociological, and legal research, recently reviewed by Hilberman (108). Much of the work is clinical and is directed at recommending or evaluating treatment approaches to rape victims or studying psychological characteristics of convicted rapists or known victims. The low rates of reporting rape and seeking treatment, and the even lower rates of conviction, have seriously hampered research in this area. Self-report studies suffer from one kind of sampling bias, but emergency room or prison studies suffer from another. It has therefore been impossible thus far to obtain representative samples of rapists or victims, but a few tentative conclusions can be drawn from available research.

Enduring psychological distress attributed to being raped is not uncommon (109, 110). The insensitive behavior of police and hospital personnel has often been contributory, to the extent that women feel raped a second time. Women have often been victimized rather than protected by attempts at conviction (e.g., court proceedings damaging her reputation, while the defendant's is not admissible as evidence) or prevention (e.g., suggestions that women should stay in at night, thus limiting their vocational and social options). Yet male concern over the possibility of false accusation runs high. In one sample (111), psychiatric treatment for victims had been more often provided and more often perceived as helpful when the victim was a child rather than an adult at the time of the attack. This may have been due in part to the fact that attempts at treatment of adult victims have often focused, like so much in psychotherapy, on the hope of finding a remediable way in which the victim contributed to her own victimization—inadvertently adding to her victimization by blaming her.

The possibility of being raped also affects the psychology of women who have *not* been raped to an as yet unidentified extent. Beginning with early childhood, families provide more chaperonage for daughters than sons (112). Women in cities are more fearful of going out at night than men are. The presumed effects of *fear* of rape are to heighten dependency on men as protectors, yet reported effects of an actual rape are both an increased fear of another rape and, frequently, a wish to avoid men altogether. We do not know at present the extent to which long-lasting post-rape trauma is intrinsic versus iatrogenic, that is, a result of traumatic or inadequate treatment of the victim. Fortunately, there appears to be considerable interest in improving treatment approaches, and a monograph

on rape victims and their treatment has recently been published by the American Psychiatric Association (108).

Childbirth

Childbirth among humans appears to be more variable, more subject to learning, and less "instinctive" than in other animals. Even something as basic as labor pain is enormously variable in amount and characteristics, subject not only to strictly physical variables such as size and position of the infant and the like, but also to prior learning, personal and cultural expectations, obstetrical procedures, and other variables not yet clearly delineated. Until recently, obstetrical catastrophes including postpartum infection were relatively common, and fear of birth was held to be a realistic part of human experience. Thus the parents and social milieu of many of today's mothers may have transmitted a psychology of fear, pain, fatalism, and the like. General taboos on sex education have extended to the subject of childbirth, so that young women are likely to form attitudes about birth many years before accurate information about it is available to them.

Unquestionably, modern medicine and obstetrics have made major and life-saving advances. Maternal and neonatal mortality rates have decreased considerably. This is widely attributed to the "medicalization" of childbirth and use of the hospital for deliveries, although American statistics continue to be less favorable than those of other countries, such as Holland, which use hospital obstetrics more selectively for high-risk births (113). Even in this country the hospital birth is relatively new. A majority of all births occurred at home as recently as 1938, less than two generations ago (114).

At present, a high proportion of maternal deaths and infant complications in America results from anesthesia (115). The need for relief of pain during normal delivery is so intimately bound up with the mother's expectations and training, and the effects of maternal and infant sedation so closely related to formation of the mother-child bond, that management of obstetrical pain and anxiety must be considered a pediatric and psychiatric research area as well as an obstetrical one. Fairly recently, observers within obstetrics, pediatrics, and some consumer groups have scrutinized psychosocial aspects of current obstetrical practices (113, 114, 116, 117), and national and international societies for psychosomatic obstetrics and gynecology have been formed.

Adverse effects of medical procedures. Research (117) has demonstrated the adverse effects of medication on length of labor and infants' arousal level and sucking behavior (sometimes persisting as long as four to seven days). Aspects of hospital milieu and practice, such as unfamiliar environment, presence of strangers, and being moved from one room to another late in labor, have been shown to adversely affect labor in human and infrahuman species (118). The common practice of separating the mother and infant immediately after birth, and maintaining a separation of at least several days punctuated by brief feeding periods, appears to adversely affect the formation of a mother-child bond (119). It is possible that the total exclusion of husband and siblings from contact with the child during the days immediately after birth, coupled with separation from the mother, may adversely affect these other family bonds as well.

The issues here are rather like those involved in the classic studies of hospitalism in infants and children (e.g., reference 120). Procedures undertaken for sound medical rationale, such as provision of treatment and prevention of spread of infection, were shown to be sufficiently disruptive to normal psychological processes that their overall value had to be questioned. The point here is not that these procedures (or some of them) are not often important for the treatment of complications, but that until fairly recently there has been a surprising neglect of the possible profound psychological implications of these procedures and the implication that they are *always* necessary, rather than a standardization of what is *sometimes* necessary.

Indeed, most of the psychiatric studies of adverse psychological responses to the childbirth situation have concentrated on preexisting pathology in the mother (which may, of course, exist) to the exclusion of the effects of the birth situation or the anticipated child-rearing situation (81). I have been unable to locate any outcome study examining the effects of preexisting maternal psychopathology *in interaction with* adverse effects of the birth situation, although it seems highly likely that a woman who is psychologically healthy, and anticipating a wanted child, might be better able to tolerate the customary degrees of psychological interference during the birth process than a less favorably situated woman.

Procedural modifications. Social and consumer movements developing around childbirth and lactation, such as the LaMaze and LaLeche groups (121), have attempted to counter some of these trends, but at times they have also tended to further compromise the mother's sense of mastery (122). For example, contemporary attempts to save what is best in both modern obstetrical practices and in more "natural" methods have primarily addressed themselves to the married couple (e.g., reference 123). Yet one-third of the first-born children in America are conceived outside of marriage (124). While about half of these conceptions are legitimated by marriage, many of the marriages are unstable. Thus the current emphasis on participation by the husband may not offer psychological help to the woman who probably needs it most. It would appear, for example, that an unmarried adolescent mother whose family is ambivalent about or opposed to the birth would have an especially great need for any modification of obstetrical procedures that could enhance her own sense of mastery and adulthood and enhance the mother-child bonding process.

Lactation

Mead and Newton (125) have called lactation a transitional period in the mother-child relationship, the time between birth and weaning from the breast. They noted that in primitive cultures this period may last for years but that in modern America it may be nonexistent. Goodall (126) has noted that in chimpanzees it may last four or five years, thus for this species almost until puberty. Prolonged lactation may be seen as incompatible with the demands of industrial society or simply as too sensual for public indulgence, and it may also be seen as a threat to the marital bond or as an obstruction to shared parenting. The usual American practice is to omit it altogether (most common) or attenuate it with early introduction of solid foods and supplementary bottles.

There are several immediate postpartum physiological advantages of breast feeding. The mother gains the benefits of nipple stimulation with consequent prolactin release and a more rapid uterine involution, and the infant obtains colostrum, which contains valuable antibodies (127). The psychological aspect of breast feeding tends to be either romanticized or neglected; to me it significantly includes fostering a mutual rather than an altruistic beginning of the mother-child relationship. A nursing mother is likely to experience milk let-down at the time the baby cries from hunger; the nursing experience both relieves and indulges the mother and child. Thus from the beginning each is providing comfort to the other. In contrast, bottle feeding is primarily for the baby's sake and provides much less libidinal satisfaction to the mother. It is clearly possible to raise children this way, particularly when they are very much wanted, but current statistics on child abuse suggest that in many cases reliance on altruism for the establishment of the mother-child bond is hazardous (128).

Fertility Control

It is generally believed that safe, reliable, available contraception and abortion are new and are effecting profound changes in the psychology of reproductive life for women. This is both true and not true. Methods of contraception and abortion have been available since antiquity, partially suppressed at times because of religious or moral beliefs, population needs, or concerns about safety or efficacy. In the United States abortion on request and the dissemination of contraceptive and abortifacient knowledge and devices were legal until 1872, when the Comstock laws were passed. Legislative and judicial repeals of barriers to these services have been recent and have been accompanied by advances in both contraceptive knowledge and its dissemination.

Thus, for many women today, the norm of controlling one's own fertility is experienced as relatively new. It follows that there is a cultural lag in assimilating these expectations. Pregnancy is now generally felt to be a matter of choice (whether conscious or unconscious) rather than fate, despite the fact that no temporary method is 100% effective. Thus the expectation of control of conception outstrips the reality. The corollary of increased choice appears to be an enhanced sense of responsibility for the outcome of childbearing, with vulnerability to guilt and other feelings that may interfere with optimal parent-child relationships. In addition, many of the new contraceptive methods carry medical hazards, enhance susceptibility to venereal disease, and can be seen as diminishing the shared responsibility of men.

Accurate information about the medical hazards of birth control pills has not been generally available to most women, although the fact that there are dangers has been disseminated by the public media and is therefore a source of anxiety for many women. Tietze's data (129) suggest that the risk of death from birth control pills is greater than that from childbirth—or from alternative contraceptive approaches including abortion—for all portions of a woman's reproductive career, except for women having frequent intercourse during years of peak fertility. After age 40, in adolescence, or for women having infrequent intercourse, regular use of the pill is not as safe as the alternatives. The safest methods for women—in terms of few side effects and some degree of protection from venereal disease and probably cervical cancer—are the diaphragm and condom, with back-up abortion. These methods have been viewed as psychologically less acceptable to women and/or their partners. The use of condoms, especially if the woman were the one insisting on it, would require a degree of sexual and general assertiveness that has not generally been a part of the behavioral repertoire of women—particularly adolescents, for whom this method would appear to be particularly indicated.

In 1969 Pohlman (130) reviewed research on the psychological aspects of family planning. Like so much of the literature on childbirth and contraception, this work suffers from an emphasis on the married couple; only 5 out of 444 pages of text discuss contraception out of wedlock! With the early adolescent population now the only group in our country showing an increasing birth rate (131), and with the current increase in both divorce rates and the acceptability of childrearing outside of marriage, there is an urgent need for more research bearing on the psychology of family planning outside of the nuclear family.

There has been a series of studies on the psychological effects of abortion (e.g., reference 132). The trend appears clear. Some women do show adverse psychological sequelae but the incidence is lower than for term births. Psychologically (as well as medically), the data support the somewhat startling conclusion that abortion is safer than normal birth. This may be true in part because both internal and external difficulties in arranging abortions still are sufficiently great to make it more likely that the woman who is ambivalent about a pregnancy will carry it to term.

COMMENT

This discussion of women's sexual lives has been presented from a generally heterosexual standpoint. However, most of the same issues apply to lesbian women as well, who may also have functional or dysfunctional sexual relationships, be raped or fear rape, bear children voluntarily or involuntarily, and in general experience most of the same vicissitudes of sexual and reproductive life as do heterosexual women. Some research bearing on issues specific to lesbian lifestyles will be briefly reviewed in part two of this overview, but the topic is sufficiently broad to merit a separate paper.

CONCLUSIONS

We find the sexual and reproductive lives of women to be a rapidly expanding research area of great pertinence to psychiatric theory and practice, with many research questions remaining to be answered. It is clear that much that has been previously assumed to be intrinsic to the psychology of women—or to the vicissitudes of accepting or objecting to the usual consequences of being a woman—needs to be reexamined. While we have not yet entirely ended the specter of involuntary sexuality and involuntary motherhood, or involuntary economic dependence on men, our society appears to be (ambivalently) moving in these directions. When young girls are generally socialized to expect to implement their conscious choices in these matters, women's attitudes toward women's (and men's) sexuality, assertiveness, and nurturance may well turn out to be very different from what is observed today. What we can expect to find will surely include the following:

1. Research done on women by women will often ask different questions and yield different data than research conducted from male points of view on women construed as "the other."
2. Women will continue to have considerable individual differences from each other, as well as similarities.
3. Conscious choices about how to live as a woman will continue to be modified by economic conditions, culture lag in assimilating changes in the realities of women's lives and, undoubtedly, by a host of unconscious factors as well. Intergenerational envy and related conflicts, as well as the conscious and unconscious fears and hopes of men toward women and women's sexuality, will continue to color women's sexual lives.

Researchers will continue to have the task of teasing out these multiple variables in order to understand women's sexuality in the context of other aspects of women's lives as well.

Part two of this overview will attempt to review some of the other aspects of women's lives, although once again we will find as many questions raised as answered—a characteristic of any vitally expanding research area.

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Rational Treatment for an Irrational Disorder: What Does the Schizophrenic Patient Need?

BY PHILIP R.A. MAY, M.D.

The author discusses the results of a review of controlled studies of treatment approaches to schizophrenia. Although the research evidence strongly supports the efficacy of pharmacotherapy, this finding should not be interpreted as meaning that all schizophrenic patients should receive antipsychotic drugs or that other forms of treatment are unnecessary. The author cautions against doctrinaire attitudes and advocates thoughtful adjustment of goals and methods to meet the needs of the various parties and situations involved in the treatment of the schizophrenic patient.

TIMES HAVE CHANGED in the treatment of schizophrenia. There are still a few who believe that drugs have no place in the treatment of schizophrenia and that they are incompatible with psychotherapy and psychosocial methods of treatment. This resistance is, however, steadily passing into history.

We have slowly and painfully come to recognize that, despite a plethora of metapsychological, metasocial, and metapharmacological speculation and pontification, we do not yet know the "cause" of schizophrenia; we are forced to admit that all current methods of treatment have serious limitations and may produce unwanted side effects. Schizophrenia is still difficult to treat. There is no miracle cure. Nor is the patient's plight improved when treatment is determined by rote or by doctrinaire prejudices rather than by thoughtful understanding of his needs and their social context and of the nature and limitations of the relevant scientific evidence.

Perhaps we should not be surprised to find that there is resistance to applying the results of scientific research. Max Planck (1), referring to the bitter struggles over his new models of the structure of matter, observed sardonically that "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."

Situations will, of course, arise in which there is little or no scientific evidence and the clinician must necessarily act on the basis of faith, hope, or intuitive judgment. It is essential, however, that he—and his patients, to the extent that they are able—understand the nature of the evidence and the basis for the decisions that are made.

REVIEW OF CONTROLLED STUDIES

Since psychological and social forms of treatment and rehabilitation are expensive and our resources are limited, it is important to know whether drugs potentiate or interfere with the effects of these methods. Is one kind of treatment more useful in some particular stage of the illness, or for some particular purpose?

Now, some 20 years after the introduction of chlorpromazine, we have a new generation of practitioners who are more experienced in pharmacotherapy and more accustomed to scientific controlled studies. It is almost universally held that drugs, psychotherapy, and psychosocial methods should play supplemental rather than competing roles. The general opinion is that drugs have their greatest use in restoring contact and establishing therapeutic relationships during the stage of flagrant psychosis and in maintaining perceptual control later on, during the stage of chronic and subacute illness. Once perceptual control has been reestablished and secondary symptoms have been reduced, and once the patient is in better contact and a relationship has been formed, then psychological and social methods can better work toward mastery of personality difficulties, life problems, and behavioral incapacity.

Despite this apparent general détente, the subject of the interaction of drugs with other therapies has been sadly troubled by dogmatic expressions of opinion and a dearth of well-controlled experimental evidence. I personally prefer systematic observation. I like to know when I am operating on faith and hope rather than on the basis of scientific evidence. This paper therefore will focus on the evidence from controlled studies.

Rating of Studies

A poorly controlled study can be just as misleading

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as a report of a single case. Therefore we rated (2–4) on a design-relevance (D-R) scale all studies published before mid-1973 of the results of nonpharmacological therapies in which there were six or more schizophrenic patients treated in the same facility as a control group. Ratings were also assigned to the comparable studies of pharmacological treatment completed before 1968 that were surveyed by Cole and Davis (5). The findings from this group are so definite that inclusion of drug therapy studies completed after 1968 is unnecessary.

Ratings took into account the degree of confidence with which the findings can be applied to the treatment of schizophrenia, the quality of the experimental design, and the analysis of results. On the D-R scale, studies in category I (well executed, well designed, and well analyzed) are given between 84 and 96 points, depending on the number of patients studied and the breadth of the assessment of patient change. Studies in category IV, the lowest included in this review, are given 24 to 36 points.[1]

This procedure makes it possible to assess the weight of the evidence for or against a particular treatment by subtracting the sum of the D-R ratings of studies that found no benefit (or worse) from the sum for studies that reported positive results. The net D-R score gives an estimate of the strength of the supporting evidence.

Milieu Care and Rehabilitation

There was reasonably good evidence (259 D-R points) that inpatient milieu treatment programs produced beneficial results. The programs that were effective had concentrated on real life problems and on planning for discharge. There was little evidence that other types of in-hospital milieu programs were effective in the treatment of schizophrenic patients.

There was also reasonable evidence (150 D-R points) that day care or home care, when practical, was as good as or even better than inpatient treatment, provided that drug treatment was adequately given. There was adequate evidence (369 D-R points) that aftercare programs helped patients remain in the community after discharge from the hospital. The successful programs had focused mainly on problem solving, social adjustment, living arrangements, obtaining employment, and facilitating cooperation with maintenance drug therapy.

Psychotherapy

A breakdown into inpatient versus outpatient and according to type of therapy is illuminating. The balance of the evidence suggested that inpatients treated with individual psychotherapy aimed at psychological understanding did not improve more than a control group (−192 and −51 D-R points, respectively). By contrast, group therapy that was focused on reality or on a group activity was more effective than a control treatment (100 D-R points) and more effective than group therapy aimed at psychological understanding (51 D-R points).

Studies of outpatient psychotherapy were few and far between, but they supported the view that psychotherapy (especially group therapy) is helpful with outpatients: individual casework and rehabilitation was more effective than control (90 D-R points); group therapy was more effective than control (31 D-R points); and group therapy was more effective than individual therapy (64 D-R points). Positive results were obtained particularly when treatment had focused on social and occupational rehabilitation, on problem solving, and on cooperation with pharmacotherapy—i.e., successful treatment was oriented more toward support and rehabilitation than toward formal attempts to promote insight and deeper psychological understanding.

This interpretation of the findings of controlled studies up to mid-1973 is supported by a recent controlled study by Claghorn and associates (6) of outpatient psychotherapy combined with drug therapy. When combined with maintenance drug treatment, group therapy that emphasized the problems and tasks of daily living resulted in a shift toward healthier perceptions of self and others.

Other Forms of Treatment

The greatest evidence of therapeutic effect was gained by antipsychotic drug therapy, which scored many thousands of D-R points. The evidence was negative for nicotinic acid treatment and ECT (−302 and −205 D-R points, respectively). Behavioral conditioning was virtually untested by controlled studies at the time of this review.

Comment

The evidence in favor of the efficacy of pharmacotherapy was overwhelming. This should not prevent us from recognizing that drugs alone are unlikely to be sufficient for an optimal treatment result. Psychosocial interventions may be of crucial importance, particularly in chronic cases and when there is residual disability. Granted, there was only modest evidence (116 D-R points) that inpatient milieu and group psychotherapy programs were of benefit, and then largely if they centered around some kind of activity or focused on discharge planning and social and occupational rehabilitation. There was, however, four times as much evidence (490 D-R points) in favor of outpatient care along similar lines. In fact, day care or home care, when feasible, produced better results than inpatient care (150 D-R points).

Thus there is considerable evidence to underline the value of combining pharmacotherapy and outpatient efforts to reduce residual disability after remission of the acute psychosis and to develop social and occupational skills. The evidence appears small beside the massive weight of the evidence from controlled research on drug therapy, but it is consistent and positive. Per-

[1]Complete information on the studies reviewed, on the D-R scale, and on the various tabulations involved can be found in (2–4).

haps if there were more well-designed studies, this disproportion in weight vis-à-vis drug therapy might be reduced.

DISCUSSION

Do Antipsychotic Drugs Interfere With Psychotherapy and Sociotherapy?

The controlled studies of treatment outcome reviewed by Uhlenhuth and associates (7) and myself (8, 9) indicate that, by the criterion of the ultimate outcome of cases followed from admission, the combination of drugs and psychosocial therapy is quite clearly superior to psychotherapy and sociotherapy alone.

There is, however, no doubt that drugs do not help everybody and that, especially in large doses, they produce troublesome side effects that work against psychological and social therapy. Hence the current controversy on drugs and their toxic effects versus psychotherapy seems to me entirely unnecessary. The proponents of drug therapy focus on main effects and on generalized data for outcome from admission for all patients. The hard-core opposition focuses on toxic effects, on drug failures, and on patients who are given maintenance treatment unnecessarily. Each group touches only a part of the elephant.

The fundamental point is that there is a trade-off between the beneficial antipsychotic effects of a drug and its adverse side effects. The optimum trade-off point varies from patient to patient and according to the immediate goals of treatment at any particular time. When patients are "snowed" with drugs, they obviously cannot benefit from social or psychological treatment (10). There is also no doubt that some patients are continued on drug treatment too long, or at higher (or lower) than optimal dosages (11). The skill in drug therapy is to avoid large doses except in the early stages of treatment or in unusual situations and to monitor the treatment process closely so that dosage can be adjusted to the trade-off point that is optimal for the current goals of treatment. In general, the closer the patient becomes to "normal," the more we should be careful to reduce drug dosage to the minimum required for maintenance of perceptual control.

I have never been entirely able to understand why Freud's views on psychopharmacology have been so generally ignored. Indeed, as Byck (12) points out in another context, Freud should be considered one of the founders and pioneers of psychopharmacology. He introduced a systematic scientific methodology to the study of centrally active drugs and considered in his papers a number of issues that have become major issues in modern psychopharmacology. He also consistently maintained that pharmacotherapy would eventually become a central aspect of treatment not in opposition to psychoanalysis or other forms of treatment.

In 1914 Freud wrote: ". . . all . . . provisional ideas in psychology will presumably some day be based on an organic substructure. This makes it probable that it is special substances and chemical processes which perform the operations of . . . special psychical forces" (13, p. 78). In 1930 he said "The hope of the future . . . lies in organic chemistry or access to it through endocrinology. This future is still far distant, but one should study analytically every case of psychosis because this knowledge will one day guide the chemical therapy" (14, p. 449).

Freud later (1933) took the position that psychoanalysis did not stand in opposition to other treatment methods, diminish their value, or exclude them. He also expressed the hope that hormones might eventually provide us with a means of coping successfully with the (hypothesized) maldistribution of energy in the psychoses (15). In 1938 Freud concluded that "The future may teach us to exercise a direct influence, by means of particular chemical substances, on the amounts of energy and their distribution in the neural apparatus. It may be that there are other still undreamt-of possibilities of therapy. But for the moment we have nothing better at our disposal than the technique of psychoanalysis" (16, p. 182).

The Nature of Drug Effect

It is commonly asserted that drug therapy acts only to reduce anxiety and is "superficial" or "only supportive." This is not in line with the evidence from controlled studies showing that drugs affect the primary symptoms of schizophrenia more than the secondary ones (2). The implication is that antipsychotic drugs reduce psychotic distortion of reality and thus reduce the anxiety secondary to that distortion.

It is reasonable to assume that lifetime patterns are not likely to be easily modified, and to be suspicious of any suggestion that short-term treatment of any kind can promote radical change. But there is virtually no information available about change at "deeper" levels over a prolonged period resulting from *any* type of therapy, and certainly no experimental support for the notion that more such change occurs during psychosocial treatments than during an equivalent period of drug therapy.

On the other side of the fence, there is no hard evidence that psychological and social treatments are any more than palliative; they help some persons to make the best use of their resources, rather than actually remedying the primary disorder, whatever that may be.

Therapeutic Relationships and Psychopharmacotherapy

It is frequently assumed that drug treatment requires no particular skill and no particular attention to the transactions of the therapeutic relationship. This is a serious error. The effectiveness of any kind of treatment depends on a good relationship with the patient and his family, and the vicissitudes of these relationships have a profound impact on the course of pharma-

cotherapy. Establishing a continuing positive relationship must therefore occupy a central position in the overall strategy for treating the schizophrenic patient, whatever the form of treatment employed.

Drugs have their limitations. They can never be all there is to the treatment of the schizophrenic person. They may be helpful in promoting restitution but they sometimes have toxic effects. Moreover, they do not enlighten the patient about his problems, inform him how to adapt, or help him to take advantage of opportunities or to accept his limitations. They do not repair self-esteem, nor do they repair the damage that the patient may have done to his friends and family. They cannot get him a job, they cannot make mothers or mothers-in-law change their minds, they don't handle traffic violations, and they cannot teach him to do something he couldn't do before. Obviously, therefore, treatment must include someone who has a relationship with the schizophrenic person and who tries to help him with the practical affairs of everyday living.

Limitations of Nondrug Therapies

It may be taken as an axiom that any form of treatment may have toxic effects if used at the wrong time, for the wrong person, or in the wrong amounts. For example, milieu therapy can have toxic, antitherapeutic effects, particularly when techniques and methods developed for neuroses and character disorders are indiscriminately applied to psychotic patients.

For patients who have defects in perception, attention, and information processing or who are disorganized and hyperaroused, the typical milieu ward, with its high stimulus input, lively group meetings, role diffusion, searches for hidden meanings, loud music, and inability to distinguish staff from patients by dress may constitute a toxic dose of environmental stimulation (17).

Delayed toxic effects may also occur. Patients tend to conform to an institutional culture, whatever it may be. What happens when patients adjust to a hospital society that is radically different from the outside world?

Psychotherapy can make some patients worse, especially when there is a negative transference or a serious countertransference. Destructive acting out may occur when inhibitions are lifted. Therapist hostility to families and significant others can have serious toxic effects and make a bad situation worse, provoke a divorce, or drive the patient into an untenable position. Some patients may protract therapy indefinitely to cling to transference gratifications or may even become sexually involved with the therapist.

CONCLUSIONS

There is as yet no universally effective and lasting cure for schizophrenia. Many patients can be helped to regain their premorbid level of functioning, but reordering a pathological personality style is a task of a different order, one that is difficult, if not impossible, to achieve by the methods currently available. Hence a major point of strategy is defining goals for each patient. It is important to distinguish between trying to achieve or maintain restitution and trying to remake the patient. It is also important to remember that what is good for one patient may not be good for another; that what helps in the early stages of treatment may not help at all later on; that measures aimed, for example, at getting the patient a job may have no effect on his temper tantrums. It is therefore essential to define clearly what the goals are and to plan specific interventions accordingly—and to make appropriate adjustments as treatment progresses.

The days when a practitioner would prescribe one therapy (e.g., drug therapy, psychotherapy, recreational therapy, milieu therapy, or a therapeutic community)—or a mélange of all therapies—for all patients should be gone forever. There should be thoughtful adjustment of goals to meet the needs of the various parties involved and the situation of the moment. For each patient there are several parties and many moments.

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The Isaac Ray Award

The American Psychiatric Association invites nominations for the Isaac Ray Award for 1977. This award, in memory of Margaret Sutermeister, is presented to a person (psychiatrist, attorney, or someone from a discipline related to human behavior) who has made outstanding contributions to forensic psychiatry or to the psychiatric aspects of jurisprudence. The purpose of this award is to promote better understanding between the law and psychiatry. The award, which will be presented at the Convocation of Fellows at the Annual Meeting of the American Psychiatric Association in Toronto, Canada, in May of 1977, includes an honorarium of $2,000. The recipient agrees to present his or her work at an institution of higher learning (or other suitable location) and to present the manuscript for publication. The presentation will be located and timed to give maximum exposure to students and practitioners of law and medicine and to other professionals.

Nominations are requested by the deadline of October 1, 1976, from any interested professional, and may be submitted to: Naomi Goldstein, M.D., Chairperson, Isaac Ray Award Board, 15 West 81st St., New York, N.Y. 10024.

The Identification and Treatment of Adult Brain Dysfunction

BY HENRY B. MANN, M.D., AND STANLEY I. GREENSPAN, M.D.

The authors hypothesize that adults who have had minimal brain dysfunction as children constitute a distinct diagnostic entity, adult brain dysfunction (ABD), which may exist alone or with a variety of other psychiatric syndromes. Patients with ABD share a basic impairment in ability to focus attention effectively; they may have different personality structures, symptom complexes, and behavioral patterns. However, with medication that corrects this impairment, remarkable improvement in the presenting symptoms and in the ability to work in therapy may occur, leading to changes in personality structure and behavior.

THE SYNDROME OF minimal brain dysfunction (MBD) in children has been well described by a number of authors (1–3). In children, MBD is defined behaviorally by the presence of short attention span, distractibility, anhedonia, and occasional poor impulse control, hyperactivity, and lack of response to reward and punishment. Investigators differ as to whether the primary deficit is lack of response to reward and punishment (1) or attentional difficulties (2, 3). Our experiences support an attentional difficulty as the primary deficit; however, we also recognize that a difficulty in the capacity to focus attention effectively would compromise the capacity to respond to social cues and expectable social reward and punishment consequences.

Initially, the syndrome was thought to represent a developmental lag. Investigators have proposed many causes of MBD, including perinatal trauma, head injury, encephalitis, poisoning, and hereditary tendencies (1–3). More recent biochemical approaches have attempted to define the syndrome as resulting from a defect in amine metabolism (1), and this shift of opinion has led to an increased focus in the past few years on what happens to these children when they become adults. Recent reports in the literature suggest that adults who had characteristics of the MBD syndrome while they were children may show a variety of neurotic and characterologic symptoms (4–7).

Morrison and Stewart (7) studied the families of 50 hyperactive children and found that 14 parents had been hyperactive as children. Of the 14, 6 were alcoholic, 1 was a sociopath, 3 had severe depression, 1 was a psychotic epileptic, 2 were heavy drinkers, and 1 was symptom free.

Cantwell (4) reported that 10% of the parents of 50 hyperactive children had been hyperactive as children. These 10% had prominent symptoms of either alcoholism, sociopathy, or hysteria.

Clinicians have also been paying increasing attention to the question of what happens to the MBD children in adolescence and adulthood (8–14). Menkes and associates (10) reported on 14 follow-up patients who had been seen as children in the Johns Hopkins Child Psychiatry Outpatient Clinic and retrospectively diagnosed as having MBD on the basis of their clinical records. The average age at time first seen was 7.5 years and at time of follow-up was 32.5 years. When these patients were reexamined, 4 were institutionalized with a psychotic diagnosis, and 2 were retarded and dependent on their families. Of the remaining 8, all of whom were self-supporting, 2 had spent time in an institution for delinquent boys, 1 in a hospital for the retarded, and 1 in jail. Eleven patients in this group were examined neurologically—8 had "definite evidence of neurologic dysfunction," usually consisting of terminal intention tremor and minimal uncoordination. None had received medication as part of his treatment. Unfortunately, the use of a retrospective diagnosis weakens the conclusions of the Menkes and associates study.

Mendelsohn and associates (11) studied 83 teenagers who had been diagnosed as hyperactive 2–5 years earlier. At follow-up over 50% of the teenagers were described as hyperactive, impulsive, rebellious, destructive, having low self-confidence, having temper tantrums, having failed one or more grades, or being involved in lying, fighting, and stealing. Of these, 18% had appeared at least once in juvenile court. Most of the children in their study had received medication and therapy for at least a brief time, but unfortunately the authors did not describe the relationship between symptomatic response to treatment and presence or absence of severe characterologic problems at follow-up.

There are several brief reports on the use of medication as part of the treatment of adults who are suspected of having minimal brain dysfunction (13–15). Gross and Wilson (13) reported the case of a 38-year-old mother of 3 hyperactive children. This woman had difficulty in organizing her thoughts and her life: "She talked in short, disconnected phrases, frequently flit-

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ting from one thought to another with no connecting bridge. She gave the appearance of being scatterbrained because of staccato, disorganized speech, yet it was clear she was an intelligent, thoughtful woman" (pp. 60–61). This patient was placed on 50 mg of imipramine twice a day, which led to "considerable improvement in the disorganization, both verbally, which could be detected by outsiders, and in terms of feeling better put together" (p. 61).

Arnold and associates (14) report the use of *d*-amphetamine in the treatment of a 22-year-old college student who reported being restless and having difficulty concentrating. His symptoms responded well to the medication. There are, however, no reports in the literature that systematically consider the issues of diagnosis and treatment of adults who may be manifesting a wide variety of symptoms and who may have had a version of MBD as children.

Although it has been hypothesized that MBD children have a wide variety of psychiatric disorders in adulthood, we would like to propose here a different hypothesis: people who have had MBD as children constitute a distinct diagnostic entity as adults, which we call adult brain dysfunction (ABD) and which may exist alone or with a wide variety of other psychiatric syndromes.

We further propose that ABD may at times be difficult to diagnose because 1) the predisposing dysfunction in childhood may be so mild as to be undetected or 2) it may be compensated for by characterologic strengths. We suspect, therefore, that many children with either mild or moderate to severe attention difficulties coupled with an unusual degree of creativity, intelligence, and capacity for interpersonal relationships (based on optimal early relationship patterns with parents who were sensitive to their needs) do not experience manifest psychiatric difficulty until they encounter the stresses of adult life.

Defining a new diagnostic entity helps us in finding a specific treatment for it. We believe it is important to learn how to identify this entity because, as we shall illustrate, there is a distinct medical treatment that, when used in conjunction with psychotherapy, leads to vastly improved prognoses for otherwise very difficult cases. In the following two brief case reports, we will present only the details that highlight the issues we wish to stress.

CASE REPORTS

Case 1. A 29-year-old single woman who owned a dress shop presented to one of us (H.B.M.) after 1 year of treatment in individual and group therapy. She originally entered therapy because she felt depressed (low self-esteem, feelings of inadequacy, loss of feelings of pleasure, early morning wakening, intermittent tearfulness, and a general sense of despair). She also had symptoms of severe social anxiety. When there was essentially no improvement after 1 year of therapy, the group therapist, a social worker, referred the patient for psychiatric consultation in connection with using medication for her depression.

Further history taken at the time of referral for consideration of medication treatment revealed that she had felt depressed and "stupid" all her life. She had done poorly in school, having to repeat the first, third, and fourth grades, and she recalled having had a short attention span and difficulty concentrating in the past as well as in the present. She recalled that she was easily distractible as a child and felt this description still applied. She said, "I can't organize and make plans, I can't think in large blocks, I can't hold onto my ideas." She also recalled being very active as a child but did not describe herself as a "wall climber."

In addition, she described anxiety reactions that were like panic attacks—they could occur as often as 1–4 times a day in any situation where she had to approach new tasks or confront people on issues that had any emotional meaning to her. With her panic attacks she described palpitations, dizziness, stomach churning, difficult breathing, muscle tension in the back and neck, and momentary feelings of confusion regarding who she was and where she was. She particularly emphasized her lifelong feeling of stupidity.

Communication with the patient's mother confirmed that as a child the patient had had a very short attention span and was very distractible. There were none of the other clinical signs of MBD, such as hyperactivity, poor impulse control, or labile mood. There was no family history of learning disability, depression, alcoholism, sociopathy, or hysteria. Interestingly, during the patient's childhood and adolescence neither the patient nor her family had ever considered the possibility of an emotional or learning difficulty. They viewed her characteristics, as most families would, as individual differences and "nothing that caused us that much trouble." As an adult she was also able to do quite well superficially (e.g., run a successful business, lead an active social life).

During the early interviews the patient always appeared to be well-groomed and attractive—even rather dramatic. She was mildly depressed and anxious, and she had difficulty completing her thoughts. Otherwise, her presentation was unremarkable.

Because of her history of early learning disorders and her present difficulty with concentration and depression, the patient was given a provisional diagnosis of ABD and placed on a trial of 10 mg of imipramine in the morning, which was increased over a 3-day period to 25 mg each morning. The patient began responding to treatment almost immediately and after the third day expressed the view that she was dramatically improved. She said, "I always felt things were out there; now things are inside my head and nothing distracts me. I can begin organizing things." Her panic attacks and social anxieties disappeared, and in her psychotherapy she was able to explore her feelings and relationships more effectively. Follow-up over a 1½-year period showed continued marked improvement.

Case 2. The patient, a "mild alcoholic," was a 28-year-old man who worked as a janitor in a local department store. He complained of anxiety attacks during which he felt panicky and fearful of dying, his heart pounded, and he had cold sweats; he also had occasional diarrhea that had been diagnosed as functional colitis. The anxiety attacks and multiple phobic elaborations that he developed were most intense whenever he had to speak up within a group of people.

The patient appeared to be a neatly dressed, extremely fidgety (constantly moving his hands and feet), and markedly anxious young man. He jumped quickly from one subject to

another and seemed to be quite disorganized in his thinking. He could stay on one thought for only a few minutes and then moved on to something else. His speech was rapid and had a pressured quality. However, his associations were not loose or tangential. His affect was appropriate but tense.

Family history revealed that a younger sister had been hospitalized with psychotic depression, an older brother had recurrent depressions, and his father had had chronic alcoholism.

The patient's history revealed that he "couldn't sit still in class—the teacher called me hyper." The patient had repeated the fifth and ninth grades. He was unable to retain what he read or heard. His report cards showed problems from first grade on with learning skills, attention span, and disruptive behavior. In adolescence the patient began to avoid most family and social gatherings and began drinking "to calm down."

Because of the patient's history of difficulty with learning and concentrating and his style of relating during the initial interviews, he was provisionally diagnosed as having adult brain dysfunction. The patient was started on 50 mg of imipramine each morning and was seen once a week in supportive psychotherapy. After one week he appeared much less fidgety and more coherent in his thinking (e.g., he was able to finish thoughts, he did not shift subjects as quickly, and there was a marked reduction in the pressure of his speech). He reported feeling better, having no further panic attacks, feeling less subjectively depressed, and cutting back his drinking to two cans of beer a day. He began working on the phobic difficulties and some marital problems and made a marked improvement in his capacities to deal with his marriage and job. Remission of the initial symptoms has now continued for over 1 year; the patient is still on his medication. With the approval of his therapist, he terminated psychotherapy 4 months ago. At the time of the last interview the patient was much improved and had been able to run for office in a local volunteer organization and win by a two-thirds majority.

These cases illustrate several characteristics that the patients have in common: 1) a history of early learning disorder with short attention span; 2) diffuse severe symptoms in adulthood, with elements of anxiety and depression or their equivalents prominent; 3) a rather remarkable, dramatic alteration in the symptom picture with imipramine; and 4) a mental status exam characterized by rapid flow of speech and many shifts of subject but without overt indicators of psychotic thinking (e.g., circumstantiality, ideas of reference, etc.).

One of the authors (H.B.M.) and several colleagues, in a general adult and child psychiatric practice in a middle- to upper-middle-class suburban community, have seen over 20 cases in the last 2 years that are similar to these 2 cases. Individuals who had the characteristics listed above presented with different ego structures and symptoms and would ordinarily have fit into different diagnostic categories—the neuroses, character disorders, or borderline psychotic states.

An important point to note is that the medication led to more organized, focused attention without feelings of euphoria or increased excitement. If these feelings occur, the possibility of a misdiagnosis should be considered. Medicated patients may, however, experience more feelings of depression due to better concentration.

These cases show that medication produced a quick change in capacity for focused attention and concentration (e.g., "I can sit and read," "I remember more," "I can think more clearly," "I can experience more feelings inside me"). This increased capacity to focus and concentrate led to symptomatic relief and, more importantly, helped these patients use psychotherapy to begin altering characterologic and neurotic problems. Patients with borderline features were also able to develop a capacity to use therapy to deal more effectively with their feeling states and interpersonal relationships. We postulate that this occurs because the basic impairment in ability to focus attention effectively manifests itself in a difficulty in focusing attention not only on the external world (e.g., reading, learning, perceiving, and understanding other people) but also on the "internal world" of feelings and thoughts (e.g., experiencing subtle emotional states, solving problems, and integrating such polarities as love and hate and good and bad).

Although the research on minimal brain dysfunction in children indicates that brain dysfunction in an adult may have a partially biological etiology, the primary dysfunction influences the development of the total personality structure and must therefore also be considered from a psychodynamic perspective. While psychodynamic issues will not be considered in any detail at this time, issues related to feelings of inadequacy, low self-esteem, counterphobic defenses, and any other consequence of an inability to focus attention, control impulses, and maintain sensitive, empathetic relationships with others should be considered in cases with a primary diagnosis of ABD.

However, psychodynamic considerations raise an important question: why is the adult version of this disorder different from the childhood version? As indicated, the adult manifests this disorder with diffuse symptoms related to depression and anxiety, often without impulsiveness and hyperactivity. We hypothesize that the adult has gained sufficient ego maturation, particularly for internalized control, to regulate some of the secondary symptoms such as hyperactivity and impulsiveness. Because the adult also has new demands (e.g., separation from parents, sexual intimacy, responsibility), his basic impairment still makes him vulnerable to the development of symptoms. The greater capacity for internalized control and self-perception may partially account for the prominence of depressive symptoms in adults with ABD.

In bright or talented children or in children who have had a very supportive and understanding environment, minimal brain dysfunction may never become manifested in a clinically pathological state until adulthood, with its attendant demands and stresses (as in case 1). It is also important to note that many children with short attention spans, distractibility, and learning deficits grow up to live reasonably happy and produc-

tive adult lives without evidence of serious psychopathology, but at present we have not distinguished the factors that lead to this outcome.

DIAGNOSIS OF ABD

It is difficult to diagnose adult brain dysfunction because many of its accompanying symptoms readily fit into other diagnostic categories, e.g., alcoholism, hysteria, depressive illness, borderline states, impulsive personality, sociopathic personality, and explosive personality. The key clinical issue is to help the patient elucidate the distinguishing factors that characterize this disorder.

Indications of any symptoms commonly associated with MBD in childhood should lead to further careful history taking. The first author found it helpful to go back and interview the parents of even a middle-age adult because the patient did not remember enough about his capacity for concentrating, learning, and controlling his impulses. Where possible report cards and school records were studied. The behavior questionnaire reported by Eisenberg (15) is quite useful in helping the patient and his family to assess his present and past functioning. A history of delayed developmental milestones, hints of even minimal brain trauma either during the birth process or early in life, and, more generally, any indications of impaired functioning in neurophysiological regulation and focusing are clues that should cause the interviewer to raise additional questions.

The response to a trial of one of three medications that appear to increase functional norepinephrine levels is very important. In these two cases, imipramine was used. *d*-Amphetamine and methylphenidate have also been used successfully. A full response to medication includes relief of the presenting symptoms and an increased ability to focus attention. Paradoxically, in some patients there actually may be increased depression as they look at themselves more clearly and become more aware of their feelings and their life situation.

Also important in making this diagnosis is a family history of learning disorders (i.e., short attention span and distractibility), poor impulse control, alcoholism, and periodic endogenous depression. It has been our experience, confirmed by other researchers (4, 7), that these symptom clusters seem to be common in the families of those children and adults who have this syndrome.

A history of chronically poor attention span or inability to focus concentration, which may be the most important diagnostic clue, will often be denied and/or rationalized by the patient. The patient will talk about everything else—his depression, anxiety, fears, nightmares, inability to sleep—but will not explain that when he reads a book he cannot focus for more than five minutes at a time and often has difficulty retaining what he does read. A positive interviewer-interviewee alliance with specific empathetic questioning about this area of the patient's life is necessary. This information is not easily volunteered, and as a result the diagnosis of ABD is infrequently considered. The clinician must also determine whether the difficulty in focusing attention is chronic (and probably secondary to MBD) or situational (and probably secondary to depression or anxiety). The possibility of a history of poor attention span may also be indicated by the patient's mental status exam. Patients with ABD, during the initial interview, may evidence restlessness and anxiety along with a marked difficulty in staying on one subject and developing a train of thought.

TREATMENT

The medical and psychotherapeutic treatment of ABD involves the use of either antidepressants or stimulants and psychotherapy. However, the medication dosages and responses and the relationship between the management of the medication and the psychotherapeutic process are sufficiently complex to warrant separate presentation in the literature.

The importance of employing caution in making the diagnosis of ABD and avoiding overzealous use of medication should be stressed. Many children have attentional and learning difficulties and even the associated symptoms of hyperactivity and poor impulse control as a result of developmental lags, anxiety states, neurotic patterns, character problems, and borderline to psychotic ego structures on predominantly functional grounds rather than as a result of MBD.

Their subsequent psychiatric difficulties as adults may represent a continuation of these primarily functional disorders of childhood or represent strictly functional disorders of adulthood. For many patients, long-term psychotherapy without medication or with drugs other than those we have mentioned is indicated. Misdiagnosing a strictly functional disorder requiring long-term psychotherapy as ABD will invariably support the patient's defensive rationalizations against self-inquiry and further convince him of the reality of his often unconscious negative self-image. Caution, care, and flexibility regarding diagnostic impressions are crucial.

CONCLUSIONS

The prevalence figures for minimal brain dysfunction or the symptoms associated with it in children run as high as 5% in some studies (1), and it is possible that the adult variety of MBD may also have a high prevalence in our population. It is our hope that clinicians will begin looking for ABD not only to further clarify its nature and elaborate on it but also because it is our impression that there is a specific treatment which is helpful and often a necessary antecedent to successful psychotherapy.

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Reversal of Tricyclic-Overdosage-Induced Central Anticholinergic Syndrome by Physostigmine

BY PAUL C. HOLINGER, M.D., AND HAROLD L. KLAWANS, M.D.

Although there is evidence that the delirium, stupor, coma, and seizure-like activity seen in overdosage with tricyclic antidepressants and antiparkinson drugs are due to the central anticholinergic activity of these agents, patients with overdosage of these drugs are still frequently misdiagnosed. The authors present a case of reversal of anticholinergic-drug-induced prolonged coma, myoclonus, and choreoathetosis by physostigmine. This report supports the anticholinergic basis of the clinical manifestations of such overdosages, provides information on the role of acetylcholine and dopamine in psychiatric and movement disorders, and illustrates dramatically the need for accurate diagnosis and treatment.

IT IS NOTABLE that until recently, tricyclic antidepressant poisoning has received relatively little attention. This is somewhat puzzling because one would expect a substantial incidence of overdosing by depressed patients, and their tricyclic antidepressant medication is a natural vehicle. We would also expect the phenothiazines and antiparkinson medications to be involved in poisonings because both groups of drugs are often self-administered by severely disturbed psychiatric patients. In addition, antiparkinson drugs are often self-administered by parkinsonian patients, a high percentage of whom have been shown to be demented later in the disease (1).

The purpose of this report is to draw further attention by psychiatrists and internists to the syndrome resulting from overdosage with these medications; cases are still frequently misdiagnosed and poorly treated, a situation particularly tragic because medical treatment is readily available and early treatment may be lifesaving.

It is well known that anticholinergic drugs such as atropine and scopolamine, as well as over-the-counter medications containing these drugs, can cause a toxic confusional state (central anticholinergic syndrome) characterized by agitation, disorientation, visual and auditory hallucinations, anxiety, purposeless movements, delirium, stupor, and coma (2–13). Accompanying this toxic confusional state is peripheral anticholinergic activity manifested by flushing, dry mouth, constipation, mydriasis, temperature elevation, motor incoordination, and tachycardia. The peripheral manifestations as well as the confusional state are dose related.

Several reports have noted that psychotropic drugs such as tricyclic antidepressants, phenothiazines, and anticholinergic antiparkinson agents can produce a toxic confusional state manifested by delirium, stupor, and coma (14–20) and shown to be due to central anticholinergic effects (10, 21–26). There is much information in the recent psychiatric literature about the delirium manifestations of the syndrome, but little is mentioned about the coma and its lifesaving treatment.

The physiological basis of the central anticholinergic syndrome is the competitive inhibition of the neurotransmitter acetylcholine at central cholinergic receptor sites (7, 8). Physostigmine salicylate is an anticholinesterase that crosses the blood-brain barrier. By competitively inhibiting the acetylcholine-destroying enzyme acetylcholinesterase, physostigmine causes acetylcholine to accumulate at cholinergic sites and is therefore capable of producing effects equivalent to continuous stimulation of cholinergic fibers throughout the central and peripheral nervous systems (7, 8).

Physostigmine has been shown to reverse the central anticholinergic syndrome and peripheral anticholinergic effects of atropine, scopolamine, and anticholinergic antiparkinson drugs (4–6, 10, 22, 26–28). Recently, many reports have also indicated that physostigmine reverses the delirium, stupor, and coma characterizing the central anticholinergic syndrome of the tricyclic antidepressants, phenothiazines, anticholinergic antiparkinson drugs, and combinations of these drugs (21–25, 29–33); in addition, physostigmine reverses the peripheral anticholinergic effects of these medications. Cardiac complications are a particularly hazardous possibility in tricyclic antidepressant use (16, 34–41); however, the mechanism of action by which the tricyclic antidepressants produce cardiac complications and the therapeutic role of physostigmine are unclear.

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In addition to delirium, stupor, and coma characterizing the central anticholinergic syndrome of the psychotropic drugs mentioned above, seizure-like activity has often been reported. Such movements have more accurately been identified as myoclonic jerks and choreoathetosis and are reversible with physostigmine (23).

The purpose of the present paper is threefold. In addition to drawing attention to a potentially life-threatening situation, we also wish to report on a specific case of prolonged coma due to tricyclic antidepressant overdosage that was reversible with physostigmine. The patient manifested the longest duration of coma before reversal by physostigmine that we are aware of in the literature. The case demonstrates the necessity of accurate diagnosis of the central anticholinergic syndrome and the lifesaving treatment physostigmine provides in even terminal stages. Finally, the reversal of the myoclonic jerks and choreoathetosis by physostigmine in this patient confirms the reports of other investigators and provides additional information on the role of acetylcholine and dopamine in movement disorders.

CASE REPORT

Case 1. The patient, a 55-year-old woman with many previous psychiatric hospitalizations for depression, was discharged from a psychiatric hospital 4 days before being brought to the emergency room of Michael Reese Hospital following an overdose of an unknown but large amount of amitriptyline. There was also evidence of ingestion of unknown but small amounts of chlorpromazine and benztropine. In the emergency room (ER) she was found to be in a coma and responsive only to deep pain. After lavage and the extraction of many pills she was transferred to the intensive care unit (ICU) 4 hours after being seen initially in the ER.

On admission to the ICU her vital signs were as follows: blood pressure, 150/110; pulse, 86 and regular; respirations, 20 (spontaneous); temperature, 96°F (rectal). The patient was well hydrated, and physical findings were unremarkable with the exception of her neurological examination. She was responsive only to deep pain, which was manifested by grimacing of her face. Her pupils reacted equally to light and were conjugate and midline. The tone of her muscles was flaccid and lacked spontaneous movement. Her deep tendon reflexes were 1+ and symmetrical. The Babinski sign was absent bilaterally, and oculocephalic and oculovestibular reflexes were present. Laboratory data indicated normal electrolytes and complete blood count (CBC); blood gases were as follows: pH, 7.30; pCO_2, 59.9; CO_2, 30; and HCO_3, 28.9. EKG was normal.

During the patient's first 24 hours in the ICU she was noted to have myoclonic jerks and choreoathetoid movements of all extremities, greater in the arms than in the legs. These occurred intermittently and were mistakenly reported as seizures by several observers. The patient was given 100 mg of phenobarbital intramuscularly, followed by 60 mg every 4 hours. The movements diminished somewhat but continued irregularly. Sometime later during the patient's first 24 hours in the ICU she was intubated due to worsening hypoventilation. She was noted to be fighting the respirator but usually triggered it by her own spontaneous breathing.

During hours 24–48 in the ICU the patient's coma continued, with intermittent myoclonic jerks and the appearance of occasional dysconjugate gaze. Her temperature rose to 102–103°F (rectal), and antibiotics were administered. Her blood pressure increased to 200/120. Phenobarbital during the second day in the ICU was decreased to 30 mg four times a day.

Hours 48–60 in the ICU were marked by continued temperature elevation of 101–103°F (rectal), with one recording of 104°F. Basilar crepitations were heard bilaterally, and the following day the chest X ray, which until then had been normal, showed bilateral infiltrates.

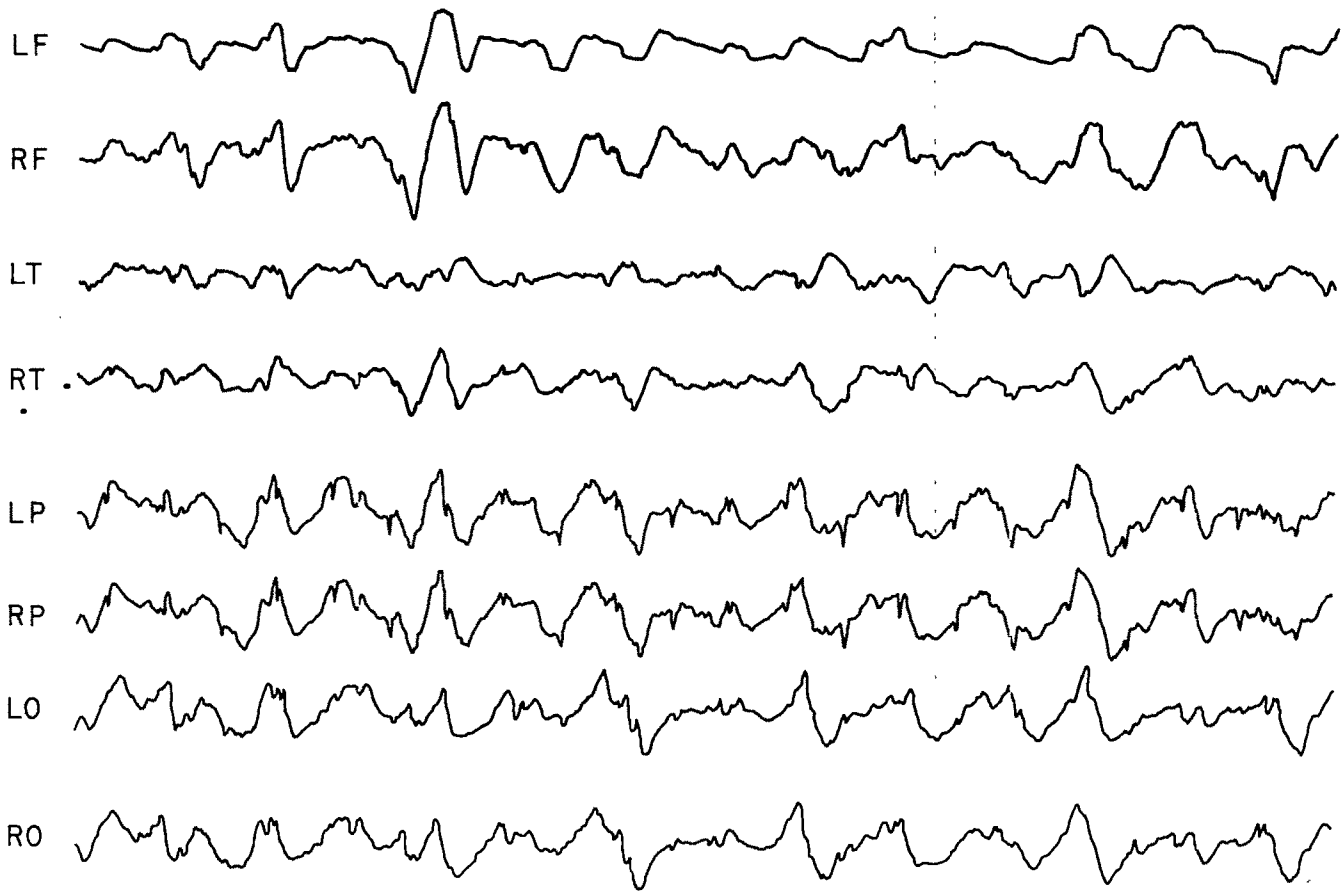
It was the 60th hour in the ICU and about the 64th hour of known coma that an accurate diagnosis was made and appropriate treatment with physostigmine was begun. The patient was initially given 1 mg of physostigmine intravenously. Within 3 minutes of physostigmine administration she opened her eyes, and a few minutes later she was able to spontaneously move her arms. During the next several minutes she gradually lapsed back into her previous state of responsiveness only to deep pain. One mg of physostigmine was administered subcutaneously every hour during the next 24 hours, increased to 4 mg every hour intravenously for 24 hours, then changed to 4 mg every 2 hours for the next 36 hours before discontinuing. One mg of methylscopolamine was administered every 4 hours intravenously for the 3½ days of physostigmine administration to counteract peripheral effects of physostigmine. Phenobarbital was discontinued.

During the first day of physostigmine use the patient's EEG showed generalized irregular ½–2-second activity that was most marked in the right frontal area, with faster frequencies following physostigmine injection (see figures 1 and 2). The myoclonic jerks and choreoathetoid movements ceased after physostigmine administration with only occasional diminished recurrence between injections; these stopped a day after the initial injection. During the 5 days following initial use of physostigmine the patient's state of consciousness varied between periods of alertness and response to verbal commands to periods of responsiveness only to deep pain. She gradually improved, however, and 8 days after physostigmine administration she was extubated; extubation before this had not been possible due to the continued inability of the patient to maintain spontaneous respirations because her respiratory efforts were often marked by apneic periods. Her temperature decreased, her lungs gradually cleared, and she was transferred to a psychiatric hospital 12 days after her admission to the ICU.

DISCUSSION

Although this case demonstrates several typical and atypical features of the central anticholinergic syndrome, two aspects in particular deserve discussion. First is the issue of the prolonged length of the coma and its rapid reversal with physostigmine. Coma has been noted in the central anticholinergic syndrome (4, 5, 14–16, 19, 23–30, 34, 37, 38, 42, 43) and shown to be reversible with physostigmine (4, 5, 23–30). Nobel and Matthew (15) reported coma in 51 of the 100 patients they studied. The longest period of coma was 18 hours; only 6 other patients were in coma for more than 8 hours, with a mean of 6.4 hours. Their

FIGURE 1
Patient's EEG Before Administration of Physostigmine*



*This figure shows spontaneous monopolar EEG activity dominated by 1–2-cycles-per-second activity. L=left; R=right; F=frontal; T=temporal; P=parietal; and O=occipital.

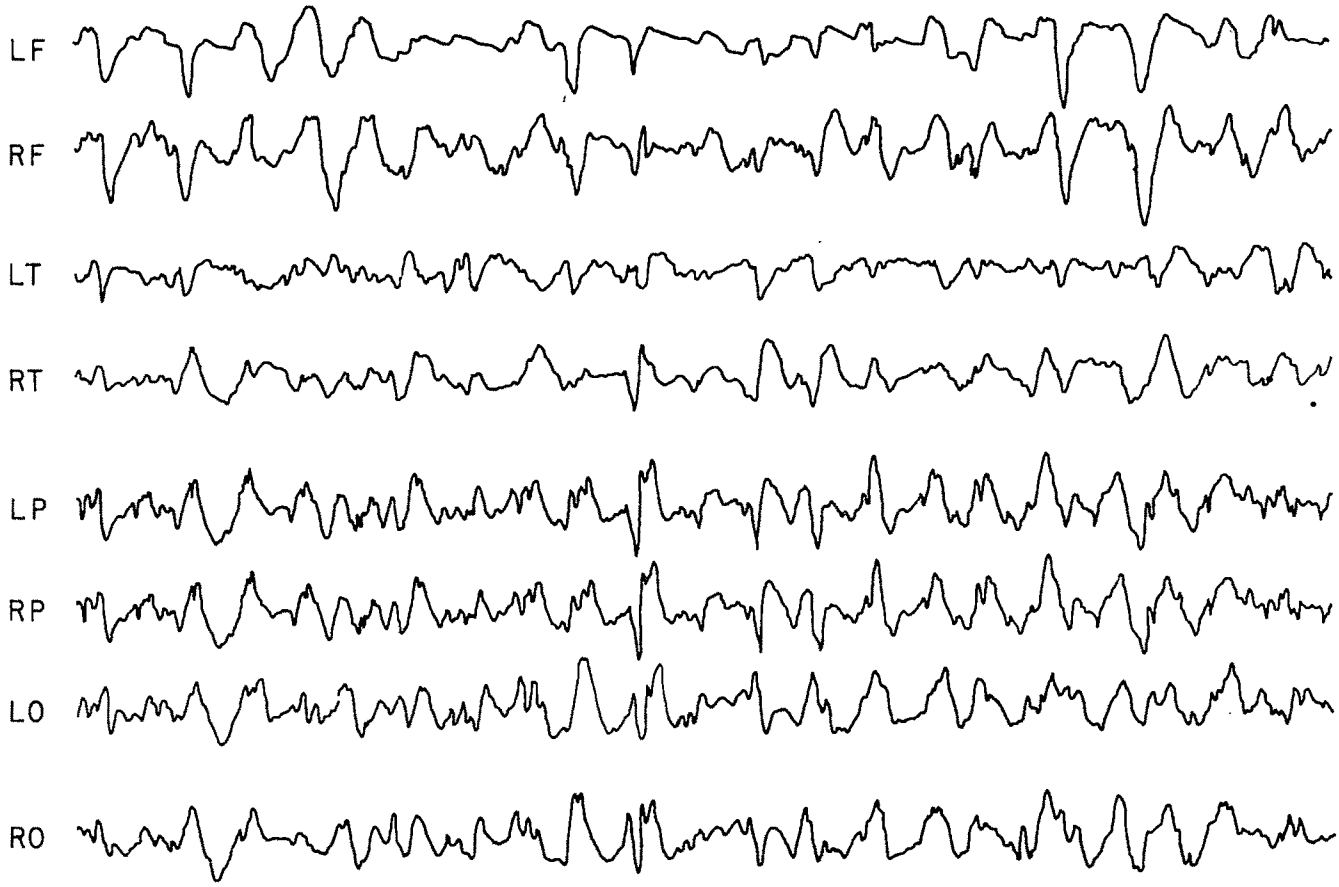
treatment was based on general supportive care.

Stark and Bethune (42) presented a case of combined amitriptyline and amylobarbitone poisoning in which the patient was unconscious for more than 4 days and recovered with treatment consisting of forced diuresis and supportive measures. Rasmussen (14), in discussing his series of 67 cases of tricyclic antidepressant poisoning and successful treatment of 1 case with pyridostigmine, noted the ineffectiveness of blood-clearing methods in such cases and suggested that the forced diuresis of Stark and Bethune was effective as treatment of the poisoning caused by amylobarbitone only. These case reports (15, 42) reflect the wide range of duration of coma due to central anticholinergic syndrome seen throughout the literature; as is often seen, Stark and Bethune's case does not represent a pure central anticholinergic syndrome because the clinical picture was complicated by ingestion of other drugs, in this situation a barbiturate.

The clinical picture of recovery from coma with physostigmine also varies from immediate reversal of peripheral and central anticholinergic effects to reversal of such effects over days with varying levels of consciousness. The variation in recovery is often dependent on the amount of physostigmine administered and when it is administered.

The present case illustrates prolonged coma of more than 64 hours secondary to ingestion of tricyclic antidepressants, phenothiazines, and antiparkinson drugs, complicated by iatrogenic use of phenobarbital to control seizure-like activity. Within minutes after physostigmine administration the patient regained consciousness after this prolonged coma, with subsequent varying levels of consciousness until complete recovery about 8 days later. The unique nature of this case, i.e., immediate but brief return to consciousness following a prolonged period of coma with eventual complete recovery, dramatically illustrates the need for accurate diagnosis and treatment of the central anticholinergic syndrome and the capacity of physostigmine to be lifesaving even after prolonged coma. Phenobarbital may have contributed to the depressing of this patient's consciousness and respiration, although to what extent is unclear, as is the role of this patient's treatment in alleviating the possible toxic effects of phenobarbital.

FIGURE 2
Patient's EEG After Administration of Physostigmine*



*This figure shows a marked increase in faster EEG activities 15 minutes after 1 mg of physostigmine was administered intravenously. L=left; R=right; F=frontal; T=temporal; P=parietal; and O=occipital.

The second issue to be discussed involves the myoclonus and choreoathetosis seen in this patient and the cessation of such movements following physostigmine treatment. Many reports have noted seizure-like activity, including myoclonus and choreoathetosis, in the central anticholinergic syndrome (14–17, 19, 23, 24, 38, 43, 44). Nobel and Matthew (15) found that 43 of 100 patients with acute poisoning by tricyclic antidepressants manifested "twitching and/or jerky movements," most frequently seen in comatose patients and least common in those fully conscious; 4 patients were noted to have convulsions. Recently, increasing attention has been focused on seizures occurring in patients receiving therapeutic doses of tricyclic antidepressants (45, 46). Burks and associates (23) suggested that the movement disorders associated with the central anticholinergic syndrome may often be inaccurately classified as seizures, resulting in treatment with barbiturates or diazepam, which may further depress respiration and level of consciousness. These authors reported 2 cases of coma from tricyclic antidepressant poisoning in which myoclonus and choreoathetoid movements were documented and reversed by physostigmine. The present report documents a case of central anticholinergic syndrome manifesting prolonged coma and myoclonus and choreoathetoid movements that were initially mistaken for seizures and treated with phenobarbital; these signs were reversed by physostigmine.

Our case report also supports Burks and associates in providing evidence for the hypothesis of a decrease in acetylcholine relative to dopamine in the basal ganglia in choreiform states, as suggested by Klawans and Rubovits (47). Studies of patients with Huntington's chorea have demonstrated a relationship between chorea and an anticholinergic state. It has been found (47–49) that physostigmine reduced chorea in Huntington's chorea but that benztropine, a centrally active anticholinergic agent, increased chorea. Levodopa, a dopamine precursor, has been reported to increase chorea in some patients with Huntington's chorea (50, 51). Thus the hypothesis developed that chorea may result from an imbalance of acetylcholine and dopamine with a resulting decrease in acetylcholine relative to dopamine in the basal ganglia. By decreasing acetylcholine and increasing amines, including dopamine, the tricyclic antidepressants affect both sides of this balance, with chorea as a predictable

clinical manifestation. Physostigmine may reverse tricyclic antidepressant-induced chorea, as seen in this and other case reports, by increasing acetylcholine through anticholinesterase activity.

Myoclonus was seen in this case and is often reported in cases of tricyclic antidepressant poisoning. Klawans and associates (52) showed that large doses of 5-hydroxytryptophan increased brain serotonin levels and produced myoclonic movements. Methysergide, a serotonin antagonist, abolished the movements. The myoclonus seen in our patient and others may be the result of the decreased serotonin uptake into serotonin neurons and subsequent increase in serotonin at the synapse caused by tricyclic antidepressants.

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Hofheimer Research Prize

The American Psychiatric Association invites applications for its annual Hofheimer Prize for outstanding research in psychiatry and mental hygiene. The award is given for a book, monograph, or series of related papers reporting the findings of major studies or research programs that have been published or accepted for publication. The award carries with it an honorarium of $750 and will be presented at the Convocation of Fellows at the Association's 1977 Annual Meeting.

Applicants must be U.S. or Canadian citizens not older than age 50. If a group of co-workers is involved, their median age must be less than 50, and the majority of them must be U.S. or Canadian citizens. Any professional person who has done creative work in this area is eligible. However, the work must have been completed or published within the last three years (on or after July 1, 1973).

To apply, submit six copies of the book, monograph, or series of related papers (or reprints) to: Joel J. Elkes, M.D., Chairman, Hofheimer Prize Board, American Psychiatric Association, 1700 Eighteenth Street, N.W., Washington, D.C. 20009. Entries will be acknowledged, but will not be returned. The deadline for submission is December 31, 1976, and any entry to be considered must be in Washington, D.C. by that date.

Tracking Difficulties and Paranoid Ideation During Hashish and Alcohol Intoxication

BY FREDERICK TOWNE MELGES, M.D.

In a double-blind study using each subject as his own control, 6 normal subjects smoked 20 mg of THC within 10- and 45-minute periods ("fast" and "slow" conditions, respectively). Each subject also received placebo and doses of alcohol calculated to be as intoxicating as the THC doses. In fast conditions, THC induced greater difficulties with tracking information over time, greater disruptions of self-other interpersonal perceptions, and more persecutory ideation than did alcohol or placebo. Similar but less marked differences were found in the slow conditions. As hypothesized, changes in tracking difficulties, self-other metaperspectives, and persecutory ideation were substantially and significantly correlated.

O wad some Power the giftie gie us
To see oursels as others see us!

—ROBERT BURNS
Ode to a Louse

DISTORTED PERSPECTIVES of others' views of the self are common in paranoid reactions (1, 2). Could such distorted views arise from difficulties with tracking information over time? That is the central question of this paper.

Previous research (3) has shown a substantial and significant relationship between temporal disorganization and incipient delusional ideation (feelings of influence, grandiosity, and persecution) when normal subjects were given high doses of THC under controlled conditions to induce temporal disorganization. The specific focus of the present paper is on possible relationships between difficulties with tracking information over time, disjunctive self-other metaperspectives, and persecutory ideation during THC and alcohol intoxication.

DEFINITIONS, RATIONALE, AND HYPOTHESIS

"Difficulties with tracking information over time" refers to problems with immediate memory and maintaining attention over time. Examples include loss of one's train of thought, inability to remember what was just said, and blocking. Such lapses of immediate or "working" memory have been found to be prominent during marijuana intoxication (4) and also have been emphasized as a central cognitive deficit in schizophrenia (5–7).

The self's view of the other's view of the self is defined as a metaperspective by Laing and associates (8). The term "disjunctive self-other metaperspectives" means that a person has difficulty comparing his own view of himself (i.e., his perspective on himself) with how he thinks others are viewing him (i.e., his metaperspective of others' view of himself).

"Persecutory ideation" refers to unwarranted suspicions about being controlled or manipulated by others (1, 2). In this paper, the terms "persecutory" and "paranoid" will be used synonymously. As has been previously proposed (1), persecutory ideation often emerges when a threat of loss of self-control interacts with predictions of control from others. The result of such an interaction is heightened self-consciousness about what others are thinking or doing in relation to the self.

The basic idea of the present research was that persecutory ideation is likely to occur when difficulties with tracking information over time disrupt ongoing self-other metaperspectives. That is, a person is likely to become paranoid when he is concerned about how others are viewing him and is having difficulty keeping track of such information. Thus, the specific hypothesis was that difficulties with tracking information over time are associated with disjunctive self-other metaperspectives, which in turn are related to the emergence of persecutory ideation.

This hypothesis is a corollary of a previously proposed general postulate that temporal disorganization

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is associated with the emergence of delusionlike ideation (3). The present research, although conducted during the course of testing the above postulate, is focused on the more specific relationships between tracking difficulties and disjunctive interpersonal perceptions that are possibly related to persecutory ideation. In order to test the hypothesis, high doses of THC were used to induce tracking difficulties in normal subjects, and comparably intoxicating doses of alcohol were employed as controls.

PILOT STUDIES AND EXPERIMENTAL APPROACH

Pilot studies indicated that a cigarette containing 20 mg of THC smoked within 10 minutes produces marked tracking difficulties. (This dosage approximates the amount of THC in hashish.) This condition was labeled "fast hashish" and was the primary experimental manipulation. In order to study lesser degrees of tracking difficulties, a cigarette containing the same amount of THC was smoked over a 45-minute period ("slow hashish" condition). In effect, this was a lower dose because it was distributed over time. Neither of these THC conditions produced delirium, i.e., subjects were oriented to calendar time, place, and person and could read and comprehend inventory statements.

It should be emphasized that the fast conditions for both THC and alcohol represent unusual circumstances that are not relevant to the customary use of cannabis or alcohol in social settings. Fast conditions were compared with slow conditions in order to differentiate marked alterations in consciousness from lesser degrees of alterations induced by these drugs.

In order to control for a general intoxicating factor that might disrupt self-other metaperspectives independently of tracking difficulties, we did pilot work to find doses of alcohol, administered in both fast and slow conditions, that were comparably intoxicating to the THC conditions. Doses of 120 ml of 95% alcohol were found to be suitable and were not associated with marked tracking difficulties in the pilot studies. These alcohol doses, along with a placebo condition, also served to control for experimental set and setting, which might influence self-other metaperspectives.

METHOD

Subjects

Considerable care was taken in the selection of our 6 subjects. They were all men in their twenties who were experienced but not excessive users of cannabis and alcohol, had no psychiatric history, were not in a stressful period of their lives, were actively employed or going to school, were judged by their peers to have good interpersonal relations and psychological health, and showed no detectable predisposition to delusory ideation on a battery of tests. Informed consent was obtained before proceeding.

Experimental Design

Since the details of the experimental design and procedures have been published previously (3), they will be only briefly outlined here. The 6 subjects were given placebo and comparable doses of THC and alcohol under fast and slow conditions. The THC cigarettes, supplied by the National Institute of Mental Health, contained 20 mg of (−)-Δ-tetrahydrocannabinol. The comparable dose of alcohol was computed to be 120 ml of 95% alcohol (1.75 ml/kg of body weight). Double-blind procedures were used; each subject was his own control for the following randomly presented dose conditions (separated by one week to avoid carryover effects): fast hashish, fast alcohol, slow hashish, slow alcohol, and placebo.

Subjects were tested at baseline (predrug), peak (maximum intoxication, i.e., 30 minutes after smoking hashish and 50 minutes after drinking alcohol), and "coming down" (3 to 3½ hours after drug consumption). On each experimental day, the subject drank a cocktail of aromatic lemon-flavored carbonated beverage (with or without alcohol) and smoked a cigarette (with or without active THC). Because ingested alcohol is absorbed more slowly than THC, drinking took place earlier than smoking to ensure that peak testing would be at the maximum level of intoxication for each drug. Placebo was randomly presented as "fast" or "slow."

Only 1 subject was tested on each experimental day. Testing was done by an experienced psychologist in the presence of a medical assistant and took place in a comfortable living room atmosphere. Between test sessions, the subject was free to listen to music, read, or interact socially with the tester and medical assistant, both of whom remained supportive but noncommittal and open-ended. The subject, the tester, and the medical assistant knew whether fast or slow conditions were to take place, but they did not know whether the drug was THC, alcohol, or placebo.

Testing

This report will focus primarily on three inventories: tracking difficulties, self-other metaperspectives, and persecutory ideation. Subjects responded to each of the inventory statements in terms of their reactions for "the last few minutes" on a seven-spaced semantic differential-type scale ranging from "not at all" to "extremely" or "not at all" to "frequently," depending on the nature of the inventory. In order to avoid response sets, some items were phrased in the direction of normality (indicated by asterisks in the lists that follow) rather than toward alterations in consciousness or psychopathology.

The 12 statements in the tracking difficulties inventory have been published previously (3); examples are as follows:

1. I tend to lose my train of thought.
2. I forget what I have just said or what I intend to say.

3. My mind is racing and I cannot sort out the thoughts that I want.
4. My mind goes blank at times, as if my memory is blocked.
5. Thoughts slip away before I can quite grasp them.

The statements on the self-other metaperspectives inventory were largely derived from the work of Laing and associates (8) and, like the other inventories, were refined during the pilot studies. The statements are as follows:

1. I am having difficulties comparing my own view of myself with how I think others are viewing me.
2. There seem to be gaps in my awareness of what other people around me are doing.
3. I am unsure of what to expect from other people.
4. I'm only getting glimpses of other people around me so that I don't know quite what they're up to.
5. I care what others think of me.*
6. It's difficult for me to figure out what other people expect of me.
7. I feel that other people around me understand my inner experiences.*
8. When I interact with others, I feel confident and on top of things.*
9. I am having difficulties in getting my ideas and feelings across to other people.
10. I feel one-down or somewhat inferior to others.
11. When I am conversing with another person, what I say and what he says appears out of step.
12. Other people must be feeling the same way I am feeling.

The persecutory ideation inventory consisted of the following statements:

1. I have the feeling that I might be being tricked or manipulated.
2. I am suspicious that other people have motives that are unclear to me.
3. Something strange is going on in the world around me.
4. I feel that it is safe to trust other people right now.*

These statements are a subcomponent of a previously published inventory of delusionlike ideation (3). Such ideation was termed "delusionlike" because it was not necessarily fixed and impervious to contradiction (3).

Along with a number of other inventories, subjects also responded to a semantic differential test of emotional reactions, which was scored for negative emotions (3). In addition, they rated their peak phase of intoxication on each experimental day in terms of degrees of "highness" on a scale of 0 to 100 (0 = completely normal and 100 = completely high). Similarly, they rated their peak phase in terms of overall "pleasantness" (0 = totally unpleasant and 100 = totally pleasant).

RESULTS

The pertinent comparisons are between fast hashish and fast alcohol and between slow hashish and slow alcohol (see table 1). For these corresponding fast and slow conditions, comparable degrees of intoxication (highness), pleasantness, and negative emotions were found, indicating that neither the degree of intoxication nor emotional factors relating to experimental set or setting accounted for the differences obtained with the other inventories.

Fast hashish induced significantly greater tracking difficulties, disjunctive self-other metaperspectives, and persecutory ideation than fast alcohol, as tested by two-way analysis of variance of baseline-to-peak changes (table 1) as well as by independent Student's t tests. Slow hashish compared with slow alcohol in-

TABLE 1
Mean Baseline-to-Peak Changes for Different Dose Conditions (N=6)*

Test	Condition					F (df=4, 20)	Significance
	Fast Hashish	Fast Alcohol	Slow Hashish	Slow Alcohol	Placebo		
Tracking difficulties	25.2	8.0**	24.5	6.8**	−0.2	13.5	p<.001
Self-other metaperspectives	14.8	2.5**	6.7	−0.8	−4.2	5.5	p<.01
Persecutory ideation	5.8	1.3*	1.8	0.3	−0.2	3.6	p<.02
Negative emotions	4.3	5.5	1.5	1.7	0.3	0.8	n.s.
Degree of pleasantness***	57.1	47.9	70.8	55.8	75.4	1.5	n.s.
Degree of highness***	86.7	75.1	67.2	64.2	25.7	23.4	p<.001

*Higher mean scores indicate greater degrees of change toward psychopathology or altered consciousness.
**Significant differences by t tests (p<.05, df=10) for fast hashish versus fast alcohol or slow hashish versus slow alcohol.
***Subject's ratings of their peak phase on a scale of 0 to 100.

TABLE 2
Aggregate Intraindividual Change Correlations Across Dose Conditions*

	Self-Other Metaperspectives	Persecutory Ideation
Tracking difficulties	.61	.57
Self-other metaperspectives	—	.88

*Average Pearson product-moment correlation coefficients, computed from intraindividual concomitant changes during each of the five experimental conditions. All coefficients are statistically significant ($p<.001$).

duced similar but less marked differences; the only significant difference was greater tracking difficulties during slow hashish (table 1). As expected, since the THC dosage in the slow hashish condition was the same as that in the fast condition but was distributed over time and was therefore essentially a lower dose, slow hashish produced fewer distortions of consciousness than fast hashish (3).

For all dose conditions, within-subject changes in the three variables (tracking difficulties, disjunctive self-other metaperspectives, and persecutory ideation) were computed. Intraindividual correlations between concomitant changes in the variables were then computed. Then, using Fisher's z transformation and the T transformation (3, 9), aggregate change correlations for all subjects were computed. These aggregate change correlations were substantial and highly significant (see table 2).

DISCUSSION

The substantial change correlations indicate that tracking difficulties, disjunctive self-other metaperspectives, and persecutory ideation are mutually interacting processes. The hypothesis was thus confirmed. The interaction of these variables can be understood by noting the items that showed the most marked baseline-to-peak increase during fast hashish compared with fast alcohol: "I tend to lose my train of thought"; "I am having difficulties comparing my own view of myself with how I think others are viewing me"; and I feel "that it is [un]safe to trust other people right now."

Hashish conditions induced greater degrees of tracking difficulties, disjunctive self-other metaperspectives, and persecutory ideation than similarly intoxicating alcohol conditions. This was particularly evident when hashish was smoked rapidly (within a 10-minute period). "Paranoid" reactions were clinically evident only in fast hashish conditions, during which 4 of the 6 subjects described themselves as "paranoid." The term "paranoid" is used advisedly, since the persecutory ideation was not necessarily fixed or systematized, but the subjects' reactions did resemble the acute unsystematized state of early delusion formation seen in psychiatric patients (1, 2).

The role of tracking difficulties in disrupting self-other metaperspectives and prompting suspiciousness is exemplified by 1 subject's report of his "paranoid" reaction in the fast hashish condition. He reported that he was only getting "chunks" of what other people around him were doing and that when he tried to "fill in the gaps" and "piece together the chunks," he came up with a host of suspicions about the missing information. He was further dismayed when he could not keep track of his suspicions in order to test them out. This rather paradoxical cognitive disorganization, characterized by a high rate of associations coupled with an inability to keep track of such associations, was present in the other paranoid reactors. We have also found it to be a common feature in retrospective accounts of so-called bad trips precipitated by cannabis in social settings (10), and it was first systematically clinically investigated and reported by Ames (10).

Tracking difficulties during THC intoxication were usually intermittent, and clinical interviews with subjects indicated that they were beyond volitional control for the most part. This intermittent loss of information about others' supposed view of the self is similar to that experienced by persons who are partially deaf, who may also have persecutory ideation (3). The intermittent loss of information may be more likely to precipitate persecutory ideation than a sustained or constant loss of information about the environment, since the person perceives fragments of how he thinks others are reacting to him and is able to pursue, at least intermittently, the implications and connections of such fragments. Acute schizophrenics who have only intermittent tracking difficulties are more likely to be paranoid than those who have a sustained inability to maintain attention over time (2, 6). That is, with sustained tracking difficulties and related problems with immediate memory, associations may become so loose that the person's thoughts wander in many different directions and a persecutory premonition therefore cannot be pursued (1, 4).

Although tracking difficulties may play an important role in contributing to the persecutory ideation during hashish intoxication and perhaps other paranoid syndromes, they are not the whole story. The attribution of a global conspiracy directed toward the self seems to be related to the telescoping of past, present, and future so that many events ordinarily separated by real time seem to be interconnected in psychological time (3). Also, as detailed elsewhere (1), the threat of loss of self-control may be the general initiating event for incipient persecutory ideation. Difficulties with tracking information over time may pose such a threat, since the person has intermittently lost volitional control over his thinking. This threat of loss of self-control may prompt the person to feel vulnerable to control from others and to attempt to predict others' plans in order to prevent their gaining control (1). Tracking dif-

ficulties may further aggravate this threat-prediction interaction, since the person who has difficulty keeping track of ongoing self-other perspectives may misconstrue the motives of other people in relation to himself. In this way, the inferences that comprise what Robert Burns called attempts "to see oursels as others see us" may go awry.

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Marijuana and Hostility in a Small-Group Setting

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The authors used several indices to assess the relationship between marijuana and hostility as both inner affect and verbal behavior in a small-group setting. Marijuana subjects reported a small but statistically significant decrease in hostile feelings after the introduction of a frustration stimulus. They also showed significantly less verbal hostility than placebo subjects both before and after introduction of a frustration stimulus. The authors note that research findings on marijuana and hostility are not consistent and suggest a multidetermined relationship based on dose, environment, nature of the frustration stimulus, and intraindividual factors.

THE POSSIBLE ASSOCIATION between marijuana and hostile human behavior has recently been reexamined. Originally, primarily on the basis of anecdotal evidence from law enforcement agencies, marijuana use was considered to be associated with aggressive and assaultive crimes (1–3). Early medical reports (4, 5, pp. 269–274 and 313–335) tended to dispute this correlation, as have recent reviews (6, 7). A study of ganja use in Jamaica (8) noted that, although police and popular belief associate the drug with violent crimes, most regular users are "known to be peaceful law abiding citizens."

Research focusing on marijuana and aggression has appeared only recently. Summaries of the effect of marijuana in animals have noted the variable effect of the drug in producing or quieting aggressive behavior (2, pp. 48–50; 9, 10). Increases in aggressive behavior have been reported in dogs (11) and rats (12, 13) given cannabis preparations. Decreases in aggressiveness or taming effects have been observed in mice (14) and in rhesus monkeys (15). The variable association between the active ingredients of marijuana and aggression has been attributed to a biphasic (stimulant-depressant) activity (16), a species-specific response, the dose level and frequency of administration (17), the type of active ingredient (18), and the development of tolerance with repeated doses (19).

Studies in man have been less equivocal. For example, Hollister and associates (20) noted that individuals' scores on the aggressive factor of the Clyde Mood Scale decreased after they ingested THC, the active ingredient in marijuana. Bloom (21) reported a statistically nonsignificant decrease in overall aggression, defined operationally as the amount of dummy electric shocks marijuana-intoxicated subjects administered to another subject. Tinklenberg (22) recently reviewed field and laboratory studies of marijuana and aggression and concluded that "there is no convincing evidence that the pharmacological properties of marijuana incite or enhance human aggression."

Current psychopharmacology research suggests that drugs which alter subjective mood or experience may produce different effects when taken in a social group setting than when taken individually. Marijuana is traditionally consumed in a group setting. Becker (23) detailed the process of becoming a marijuana user and stressed the interpersonal aspect of this learning process. Starting with the LaGuardia report (5, p. 247), almost all other writings about nonresearch marijuana use have reported on the social setting in which marijuana consumption often occurs (24–26). Based on research observations, Jones (27) noted that subjects behave differently when they receive marijuana when alone than they do during marijuana use in a group setting. When tested alone, subjects were quiet, relaxed, and slightly drowsy; in the group setting they evinced elation, euphoria, laughter, and a lack of sedation. Galanter and associates (28) observed in groups of intoxicated research subjects a decreased tendency to express anger, along with a decreased participation in group process. Babor and associates (29) noted that the effects of marijuana may suppress social interaction in a task-oriented research group setting; Mendelson and associates (30) studied the same subjects and found them less hostile and anxious and more friendly and carefree. In a previous pilot study, Salzman and associates (31) had observed the Mendelson and associates research groups for verbal hostile behavior. Self-ratings of hostility decreased, and sub-

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jects rated each other as more friendly, cooperative, and understanding. Ratings of taped verbal interaction revealed that overall hostile communications shifted from overt criticism to sarcasm as the most frequently used indirect expression of hostility. The present study was designed as a controlled follow-up of these preliminary observations.

METHOD

The subjects were 60 physically and emotionally healthy male volunteers between the ages of 21 and 30. Fifty of the subjects had some college education. All had prior experience with marijuana; more than half of the subjects smoked marijuana at least once a week and considered themselves social marijuana users. Half of the subjects experimented with hallucinogens, amphetamines, and barbiturates, but none of the subjects reported narcotic use. The mean Taylor Manifest Anxiety (32) score was 7.02, and the mean Langer Social Adjustment (33) score was 1.3. These figures suggest that these subjects were less symptomatic than previous subjects in our laboratory (34) or tended as a group to deny psychological impairment.

The overall design of the study has been described in detail elsewhere (35, 36); we will present only a summary here. The subjects, who did not know each other, were assigned to 3-person groups, each of which was randomly designated as active marijuana or placebo according to a double-blind schedule. Each 3 person group completed the study independently. Each group met for a 10-minute discussion that focused on the development of a consensus story for a neutral Thematic Apperception Test (TAT) picture (card 2). This and subsequent group discussions were videotaped with the knowledge of the subjects and were used for group process scoring. Each subject smoked completely one cigarette that contained either 2.2% THC or placebo (both provided by the National Institute of Mental Health); all subjects in each 3-person group smoked the same substance. A second group discussion was then held; the focus was on arriving at a consensus story for TAT card 10. Subjects were then told that the consensus story they had just developed was "inadequate" and they would have to arrive at a new one. This was conceived of as an experimental frustration stimulus within an interpersonal group setting. Each group then met for a third discussion.

Individual hostility levels were assessed before and after each group discussion on the Buss-Durkee Hostility Inventory (BDHI) (37) and the Symptom Checklist (SCL-90). Interpersonal behavioral (verbal) hostility during each group discussion was assessed via the hostile interpersonal rating scale (HIRS) devised in our laboratory and by Bales' Interaction Process Analysis (IPA). Ratings of group cohesion, task performance, and affects other than hostility will be presented in a separate communication.

RESULTS

The effect of marijuana on hostility as an inner affective or motivational state is summarized in table 1. Change scores on the BDHI and SCL-90 anger-hostility scale reflecting drug effect were similar for marijuana and placebo recipients. However, following the frustration stimulus, small but statistically significant decreases in hostile affect were reported by the marijuana recipients; placebo subjects' scores increased slightly.

The effect of marijuana on verbal behavioral hostility is summarized in table 2. Marijuana produced a small but statistically significant increase in sarcastic communications, as rated on the HIRS. There was a statistically significant increase in total negative verbal

TABLE 1
Hostility as an Inner Affect: Mean Change Scores for Subjects Given Marijuana (N=30) or Placebo (N=30)

Item	Scores		
	BDHI Total	BDHI Assault	SCL-90 Anger-Hostility
Predrug period			
Marijuana	16.07	3.23	0.87
Placebo	15.30	3.23	1.00
Drug effect*			
Marijuana	−0.43	−0.07	−0.33
Placebo	−0.02	−0.10	−0.15
Frustration effect**			
Marijuana	−0.31	−0.35	−0.11
Placebo	1.37	0.43	0.20
Significance	$p<.054$	$p<.006$	$p<.031$

* Defined as the difference between the mean of the two predrug individual testing scores minus the mean of the two postdrug individual scores.
** Defined as the postgroup prefrustration individual testing scores minus the postgroup postfrustration scores.

TABLE 2
Verbal Hostility: Mean Change Scores for Subjects Given Marijuana (N=30) or Placebo (N=30)

Item	Scores	
	HIRS Sarcasm	IPA
Predrug period		
Marijuana	0.166	6.73
Placebo	0.291	9.25
Drug Effect*		
Marijuana	0.57	5.20
Placebo	0.13	−2.42
Significance**	$p<.05$	$p<.02$
Frustration effect***		
Marijuana	−0.50	−1.73
Placebo	0.46	2.33
Significance	$p<.02$	$p<.01$

* Predrug minus postdrug.
** Student's t test (two-tailed except for the drug effect HIRS score, where a one-tailed test was used).
*** Prefrustration minus postfrustration.

behavior (measured by combined IPA scales 10, 11, and 12) following marijuana ingestion. After the frustration stimulus, both total negative verbal and sarcastic behaviors significantly decreased for marijuana subjects but increased for the placebo subjects.

In order to examine the relationship between the two methods of determining manifest verbal behavioral hostility, a correlation was computed between HIRS sarcasm change scores and the IPA raw scores for the marijuana subjects.[1] The correlations were .66 ($p<.01$) and .59 ($p<.01$) for postdrug minus predrug scores and postfrustration minus prefrustration scores, respectively. These are strong correlations for two independently derived and rated measures of behavior.

DISCUSSION

In the laboratory setting of a small-group interaction, marijuana-intoxicated subjects reported a small but statistically significant decrement in hostile feelings after frustration compared with placebo subjects, who experienced a slight increase. The present study also demonstrates a slight increase in sarcasm on the part of the marijuana-intoxicated subjects, a replication of previous findings from our laboratory. The increase in sarcastic communication correlated with, and is probably reflected by, the IPA-rated increase in negative verbal communications and was included within the overall ratings. The decreased inner affective hostility in conjunction with increased negative verbal behavior suggests that this dose of marijuana, taken in the group context, may have had a mild disinhibitory effect on the subjects, enabling them to feel less internally angry and less externally constricted in their interpersonal communications. Pepitone and Reichling (38) have noted that under such circumstances hostility is often visible.

In previous studies in our laboratory (35, 36), the frustration stimulus produced increases in hostile affect and verbal behavior in all subjects. It was not surprising, therefore, that placebo subjects demonstrated increased hostility as both affect and as verbal behavior after the frustration stimulus. Among marijuana smokers, however, hostility as an inner affective state decreased slightly, albeit significantly, as did verbal negative behavior, including sarcasm, after the frustration stimulus.

We may infer that marijuana used in laboratory group settings with a mild frustration stimulus may lead to a diminution in negative verbal interpersonal behavior and affective hostility. It has been suggested elsewhere that marijuana generally serves to inhibit the expression of violent or aggressive behavior: "Marijuana-induced relaxation of inhibitions is not ordinarily accompanied by an exaggeration of aggressive tendencies" (39). In this laboratory experiment, therefore, the marijuana intoxication "muffled" or "modified" the expected hostile response to a frustration stimulus. Our data, along with other clinical and research findings, suggest that marijuana intoxication is not associated with increased hostility. Furthermore, even under conditions that are expected to produce hostility, marijuana-intoxicated subjects feel less hostile and exhibit decreased negative verbal behavior (including sarcasm).

Nahas (17, p. 286) has suggested that hostile and violent behavior may occur during marijuana intoxication. Indeed, isolated cases of aggression and hostility were included in the LaGuardia report (5, pp. 269–274, 313–335, and 354–360). Halikas and associates (40) reported in interviews with marijuana users that 43% experienced occasional aggressive feelings and 37% reported feeling irritable. Kolansky and Moore (41) reported two cases of verbal aggression and sarcasm associated with chronic marijuana use. Thus, the literature regarding the lack of association between marijuana and hostility is not unanimous, and any hypothesis about the effect of marijuana on hostility must include the potential for an increase as well as a decrease. Furthermore, subjective reports of marijuana intoxication may differ from observable behavior. Our observations and those of Galanter and associates (28) illustrate the lack of correspondence between self-ratings of hostility and the ratings of nonintoxicated observers.

In order to reconcile the various observations regarding hostility and marijuana, we hypothesize a multidetermined relationship with the following components.

1. *Dose.* At low doses, marijuana may produce mild disinhibition of the type seen in our subjects after ingestion and before frustration. At higher doses, the intoxication may facilitate hostility in certain settings (42). Thus, Nahas comments, "overt aggressive behavior . . . requires the absorption of enough active material and also an unfavorable setting" (17, p. 286). Very high doses of marijuana may produce sufficient sedation to obscure any other effect (43).

2. *Environment.* The laboratory setting may have contributed to the observed decrements in marijuana-intoxicated subjects' hostility following a frustration stimulus. The subjects, feeling the challenge to improve upon their task performance, may have been able to increase their vigilance and attention enough to successfully complete the task. Weil and Zinberg (44) have reported the ability of mildly intoxicated experienced marijuana smokers to improve vigilance and performance when challenged by certain psychological test performances.

3. *Stimulus.* The frustration stimulus, while adequate to produce hostility in placebo subjects, may not have been strong enough to stimulate hostility in marijuana-intoxicated subjects. A stronger stimulus (e.g., a threat) in a less friendly environment might produce hostility, particularly with a larger dose of marijuana. The present research design (like many others) does

[1]Correlations were not compared for the placebo subjects because we thought that there was insufficient variance in this group to permit meaningful interpretation of a correlation.

not allow for extrapolation to a more hostile environment, such as a ghetto, or to a stronger stimulus, such as war.

4. *Subjects*. Factors within the individual subject, such as prior experience with marijuana and expectations about the experiment, may be of considerable relevance to the production of hostility. The range of available adaptive ego defenses may also be important. If, for example, the intoxicated subject has a well-developed, healthy (nonpathological) obsessional character style, then the challenge and dose of marijuana in our study might help to mobilize these defenses. Subjects may have used isolation of affect (particularly hostility), intellectualization about the experiment, and rationalization about the frustration stimulus to temporarily override the intoxication and complete the task. If these ego defenses control more serious psychopathology, however, then higher doses of marijuana in the presence of stronger stimuli and nonsupportive environments might lead to decompensation rather than disinhibition. Panic, psychosis, and concomitant aggressive behavior might result (45).

We hypothesize that the relationship between marijuana and hostility may be the collective result of an interaction between the drug and other factors. In our laboratory, the supportive group structure, modest dose, and mild frustration stimulus were not associated with increases in hostility. However, we suggest that the relationship between marijuana and hostility requires further exploration.

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Prompt Publication Policy

The *Journal* would like to remind authors who are particularly interested in early publication (whether to establish priority of an idea, reveal innovative results of new research, or for other pressing reasons) of its prompt publication policy. Under this policy, short (maximum of six double-spaced pages) manuscripts will be considered for publication in the Brief Communications section of the first available issue. These manuscripts must still undergo expert scrutiny before being accepted, and two months must be allowed for the printing process. However, the time required for publication of these short articles can be lessened considerably.

Authors who would like to have their manuscripts considered under this policy should indicate this desire, as well as the reasons for it, when they submit their manuscripts.

The Treatment of Anorexia Nervosa

BY ALEXANDER R. LUCAS, M.D., JANE W. DUNCAN, M.D., AND VIOLET PIENS, R.N.

The authors report on their treatment of 32 young patients with severe anorexia nervosa who had lost an average of 37% of their original body weight. The therapeutic approach, conceived to meet both the physiological and the psychological needs of the patients, was carried out in a psychiatric unit for adolescents in a general hospital and involved separation of the patient from his or her family, treatment of the malnutrition, individually planned psychotherapy, and concurrent work with the family. The importance of accepting the patient's uniqueness, maintaining long-term contact, and encouraging the patient's striving toward constructive growth and autonomy is emphasized.

TREATMENT OF ANOREXIA NERVOSA has ranged from coercive feeding calculated to restore metabolic balance and normal weight to approaches that ignore the malnutrition and focus on the dynamic issues assumed to underlie the disturbance. Neither of the extreme approaches has been satisfactory, nor is anorexia nervosa a disorder that will remit spontaneously once its course has become established. The high mortality rate (up to 22%) (1, 2) attests to these facts.

We believe anorexia nervosa is a serious and potentially fatal disorder requiring prompt and specific intervention to treat its physiological and psychological components. In its advanced stages it constitutes a medical and psychiatric emergency. With appropriate treatment, a remission of all the symptoms, if not a permanent cure of the underlying tendencies, should be possible.

The extensive body of literature on anorexia nervosa has been documented in the monograph of Bliss and Branch (3) and in more recent reviews (1, 4). Between the extreme approaches to treatment lies a range of techniques with varying theoretical foundations and methods. Although many treatment approaches are advocated, until recently there has been a consensus that the treatment of anorexia nervosa is difficult and usually prolonged.

Behavior modification has been advocated because of its simplicity and the rapidity with which the treatment can produce weight gain. The coercive nature of the treatment described in some reports and the resulting rapid changes in body image should be cause for concern about the hazards of this form of treatment (5–7). Bruch (8) stated that true benefit is derived from weight gain only if it is integrated with correction of the underlying individual and family problems.

Bed confinement, forced feeding, and psychotropic medication constitute the treatment preferred in Great Britain (9, 10). Like behavior modification, this approach is fraught with risks. Tube feeding, aside from its symbolic meaning, carries the hazard of overhydrating the patient and thus excessively taxing the cardiovascular system. Berkman warned about the hazards of intravenous fluid administration years ago (11). He stressed the importance of three regular meals containing bulk and advocated a regimen designed to help patients regain mastery over their eating behavior.

When psychotherapy directed at uncovering unconscious motivation for self-starvation and removing the defenses against anxiety is the sole mode of treatment, the eating behavior will very likely remain unchanged or even worsen.

Successful treatment efforts (4, 11–16), despite their variation in specific techniques and differing underlying theoretical considerations, have several factors in common: 1) there is one primary therapist who exerts a strong influence over the patient or there is a close-knit treatment team who use a consistent approach and who are identified by the patient as a cohesive group; 2) there is genuine commitment to the patient, who is approached as a unique human being; 3) there is continuous long-term involvement with the patient; 4) there is understanding of both the physiological and psychological components of the disorder, and treatment ignores neither of these components; and 5) there is awareness of family and other environmental influences that help or hinder the patient's progress, and these influences are considered in the treatment plan.

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The authors gratefully acknowledge the contribution to the treatment of patients made by residents in psychiatry and child psychiatry and by the staff of the Residential Treatment Unit as well as the assistance of Veronica Blaha, R.N., in reviewing patient records.

This study will describe the treatment approach that we have evolved during the past 3 years on the basis of our training and our experience in treating patients with anorexia nervosa at the Mayo Clinic.

DIAGNOSTIC CRITERIA

Anorexia nervosa is a distinct psychosomatic entity that should be differentiated from other forms of psychogenic weight loss, as Bruch emphasized (4). She identified as central issues the struggles for self-respect, identity, control, confidence, and effectiveness. The criteria of Feighner and associates (17) are useful guides in defining a homogeneous patient group. The characteristically distorted attitude toward food and eating, with an overriding desire to maintain thinness, is perhaps the one clinical feature necessary for a diagnosis of anorexia nervosa. Setting absolute age and weight criteria is arbitrary; most often the illness begins around puberty or shortly after, between ages 10 and 20, but it may begin later. The later the symptoms begin, the greater is the likelihood that another illness, such as depression or schizophrenia, is primary. Feighner and associates used weight loss of at least 25% of the original body weight as a criterion for diagnosis in psychiatric research, but the diagnosis can and should be established before that degree of inanition is reached.

DESCRIPTION OF PATIENTS

Since October 1971, 32 patients with anorexia nervosa have been treated in the Mayo Clinic's Residential Treatment Unit (see table 1). Twenty-seven of the patients were girls, and 5 were boys. The age at admission for the girls ranged from 10 years, 5 months, to 21 years, 10 months, with a mean age of 17 years, 2 months. For the boys the age at admission ranged from 11 years, 7 months, to 16 years, 5 months, with a mean age of 13 years, 6 months.

The mean age at onset of illness for the 5 boys in our series was 12 years, 5 months. For the 27 girls it was 16 years (see figure 1). The duration of illness before admission ranged from 5 to 49 months, with a mean duration of 13.8 months. Weight loss averaged 19.9 kg (43.8 lbs), or 37% of the patients' original body weight. All patients had a distorted attitude toward food and eating and a desire to maintain thinness that overrode hunger and parental threats. All 27 girls were amenorrheic. Five were prepubertal or had delayed menarche, and 22 became amenorrheic as part of their illness. Overactivity was a prominent feature in 29 of the patients. Excessive exercising had been reported in the histories of most, but in others this activity became evident only after they were admitted. Bradycardia was observed in 11 patients. Episodes of bulimia were reported in 10 patients and vomiting in 14.

TREATMENT EXPERIENCE

General Principles

The treatment we will describe applies to cases of severe anorexia nervosa in which we judged hospitalization to be necessary. We have used a combined medical-psychiatric approach, with a carefully coordinated team effort dealing with both the inanition and the psychological conflicts. Our therapy has the four following facets:

1. Separation from the home to interrupt the power struggle between child and parents and to remove the child from an atmosphere emotionally charged on the issue of eating.
2. Treatment of the malnutrition. By taking responsibility for eating behavior and the decisions involved, we initially foster dependency on the therapist and the hospital, but we gradually encourage increasing autonomy for the patient in managing her or his own eating. The aim is for the patient to achieve a level of comfort in eating without excessive awareness of eating or counting calories before dismissal from the hospital.
3. Psychotherapy is focused on the individual. Initially supportive, it deals eventually with such issues as the expression of anger, control, ambivalence toward parents, and dependence and independence. Psychotherapy continues after the patient leaves the hospital but varies in frequency and intensity, as dictated by the patient's needs and reality factors.
4. Work with the family. This is essential if the patient is to return home; it may be more or less intense, ranging from supportive counseling about family interaction with the child to active treatment of the problems of other family members.

Treatment of the Malnutrition

Patients with anorexia initially eat in a separate dining room under the supervision of a nurse. A diet tray—calculated to maintain the admission weight—is served, with the expectation that the patient will eat everything. Periodically, as the patient is able to tolerate increased amounts, small caloric increments are added to achieve gradual weight gain. As few ward staff as possible are involved in the direct supervision of eating to avoid power struggles and the playing of one staff member against another. Crucial in the success of this approach are the skill and attitude of the nurse who supervises mealtime. The nurse needs to convey a sense of firmness and equanimity and must also be alert to attempts at deception and manipulation. He or she must be patient, compassionate, and unruffled by the patient's emotional outbursts. As progress is made, the patient moves to the regular dining room, where she or he serves herself or himself under gradually diminishing staff surveillance.

Psychotherapy

The psychiatrist directs the medical regime and conducts the psychotherapeutic discussions of the treatment process. The initial interviews set the themes for

TABLE 1
Age at Onset, Duration of Illness, and Weight Changes of 32 Patients with Anorexia Nervosa

Patient	Sex	Age at Onset		Duration of Illness (months)	Weight Before Hospitalization (kg)			Number of Months in Hospital	Weight at Discharge (kg)
		Years	Months		Maximum	Minimum	Loss		
1	F	15	10	14	58.1	39.0	16.3 (28%)	3	49.0
2	F	14	10	5	53.6	32.2	21.4 (40%)	5	49.5
3	F	15	5	7	56.8	37.7	19.1 (34%)	4	52.7
4	F	18	0	22	58.1	26.8	31.3 (54%)	5	44.5
5	F	15	7	9	52.2	41.3	10.9 (21%)	3½	54.5
6	F	18	10	10	49.0	34.1	14.9 (30%)	2	50.4
7	F	18	9	11	49.9	37.2	12.7 (26%)	1½	50.4
8	F	13	5	49	53.1	31.3	21.8 (41%)	11	43.6
9	F	10	0	5	33.6	25.4	8.2 (24%)	3	35.4
10	M	13	10	7	61.3	36.3	25.0 (41%)	4	42.7
11	M	11	7	4	39.0	30.0	9.0 (23%)	4	39.5
12	F	18	2	5	65.8	35.9	29.9 (45%)	3	43.6
13	M	10	10	9	37.2	23.2	14.0 (38%)	6	33.6
14	F	13	2	7	40.9	29.5	11.4 (28%)	4½	36.8
15	F	17	0	12	61.3	36.3	25.0 (41%)	3	48.1
16	M	11	4	24	58.6	32.2	26.4 (45%)	2½	46.3
17*	F	17	10	6	56.8	33.6	23.2 (41%)	½	42.0
18	F	12	1	8	39.9	32.2	7.7 (19%)	5	42.2
19	F	18	9	5	48.1	35.0	13.1 (27%)	5	42.2
20	F	15	1	11	52.2	34.1	18.1 (35%)	3	41.8
21	F	15	6	17	57.2	34.5	22.7 (40%)	2½	48.1
22	F	10	4	7	36.7	21.3	15.4 (42%)	2½	30.9
23*	F	16	9	26	67.1	33.6	33.5 (50%)	1	44.5
24	F	19	7	24	47.7	32.0	15.7 (33%)	1	43.6
25	F	16	10	7	56.8	37.2	19.6 (35%)	2	44.0
26	F	14	4	22	61.3	43.6	17.7 (29%)	2	50.4
27	F	19	6	28	48.6	24.3	24.3 (50%)	8½	39.5
28	F	15	11	21	62.2	38.6	23.6 (38%)	4	46.8
29*	F	18	2	9	49.9	31.8	18.1 (36%)	1	34.5
30	M	14	5	24	72.6	37.2	35.4 (49%)	7	53.6
31	F	16	8	13	54.5	35.0	19.5 (36%)	3	45.9
32	F	15	1	13	65.8	37.7	28.1 (43%)	4	53.1

* These patients were discharged against medical advice.

subsequent therapy. Therapist and patient can acknowledge that dieting and its resultant malnutrition have become severely destructive and are out of control. The patient wants and needs help to stop losing weight and, gradually, to learn to eat in accordance with nutritional needs instead of fears.

The psychiatrist explains that he or she will prescribe a diet designed only to stabilize the patient's present weight and to avoid the discomfort associated with food intake and transient fluid retention insofar as is possible. Periodically, the psychiatrist will prescribe small increases in the calories and bulk in the patient's diet, but only in conjunction with monitoring of the patient's physical and emotional condition. The patient is assured that the treatment plan will be as flexible as her or his needs may dictate. In brief, the patient is asked to relinquish control of decisions pertaining to eating and to accept the necessary staff monitoring of food and fluid intake and activity.

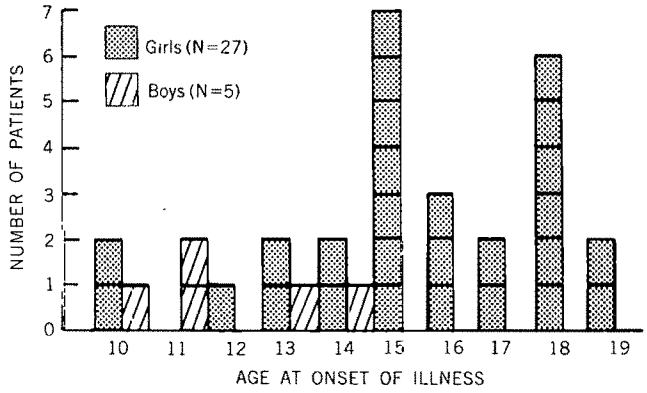
The psychiatrist tells the patient that later she or he may select a target weight within a range considered medically safe that she or he will achieve and maintain before leaving the hospital. This target weight will be achieved in steps, and each step will be associated with less of a need to monitor indices of clinical condition and therefore increased opportunity for the patient to direct her or his affairs in regard to eating and other aspects of life. She or he may learn to enjoy eating in accord with nutritional needs without external control of eating behavior.

Finally the psychiatrist notes that his or her values regarding weight and physical appearance may not be in accord with the patient's but that he or she will not impose his or her beliefs on the patient except that he or she will not permit the patient to starve or to become fat.

The objective of the initial interviews is to stabilize the patient at her or his own weight and level of functioning, permitting the patient to marshal defenses to cope with anxiety.

In our experience, as in that of others (12, 18), the patient's symptoms of apathy, social distance, mental fatigue, and shallow or inappropriate affect may reflect only physical starvation and psychological helplessness. They are therefore not targets for therapeutic intervention. Rather, discussions of the medical re-

FIGURE 1
Age at Onset of Illness of 32 Patients with Anorexia Nervosa



gime define for the patient a circumscribed and temporary dependency on the therapist, minimizing the anxiety associated with threats to autonomy.

Continuing Psychotherapy

The therapist continues dynamic management of the patient's autonomy and level of regression in continued discussions of the themes meticulously defined in the early sessions. The therapist freely uses data from staff observations of the patient in interactions with staff and with peers. In accord with the principles of psychotherapy with adolescents, psychic synthesis rather than analysis of defenses is sought (19). Only the defense mechanisms of denial and projection are interpreted because these seriously interfere with the patient's appreciation of reality (20).

Revision of body image. The therapist selectively focuses on data that pertain to the discrepancy between the patient's body image and her or his body configuration (21). This discrepancy, with its associated defective perception of reality, is approached indirectly in terms of understanding changes that occur in body structure and function as treatment progresses. The therapist is assisted by the patient's relatively realistic perception of the body configuration of other emaciated patients and by reflecting on comments made by nonanorectic peers. The patient's gradual delineation of a body image more consistent with her or his body structure is manifested in the therapy sessions.

Revision of body concept. Revision of body concept to include recognition of internal body sensations is a formidable therapeutic task. It is approached indirectly by the therapist's fostering the patient's awareness that healthier peers use hunger or satiety signals to guide realistic eating behavior. Data concerning the patient's difficulty in recognizing sensations and differentiating these feelings from emotions come under therapeutic investigation.

Milieu therapy. A residential adolescent treatment unit provides many models for imitation and identification. Additionally, in the natural course of events various interpersonal conflicts arise. All aspects of the patient's functioning are suitable data for therapeutic discussion. The patient's interactions with other anorectic patients are especially enlightening because the patient may see in them a repetition of earlier relationships with the mother.

Termination of hospital treatment. When the patient is ready to leave the hospital, psychotherapy is usually at a point where topics other than eating—the patient's relationships with peers and with parents, the expression of anger, the issues of self-assertiveness and independence—are being dealt with. In therapy and on the ward, the patient has experimented with and has learned to master more effective ways of dealing with others. We look for spontaneity in behavior and a return of the patient's sense of humor as signs of recovery. Continued follow-up is essential because treatment is usually not completed at discharge.

RESULTS

Patients remained in the hospital up to 11 months; the usual stay was between 3 and 5 months. Those who weighed the least at the time of hospital admission required a longer time to attain a weight adequate to warrant transition to outpatient care. Three patients left against medical advice after less than 1 month of treatment. Each patient's weight gain achieved in the hospital is recorded in table 1, where it can be compared with the previous weight history and duration of hospitalization. Clearly, each patient gained weight. The secondary symptoms of apathy, mental fatigue, and depression diminished gradually as weight gain was achieved. Increased spontaneity in relationships with peers and adults and freedom to express feelings candidly usually occurred.

The test of the effectiveness of treatment rests not in the statistics of weight gain but in the patients' ability to master eating behavior, as demonstrated by maintenance of both physical health and psychological integrity after treatment. A follow-up study of these patients, assessing personal, social, and academic adjustment, is in process. Although the great majority of the patients maintained substantial weight gains and made improvements in their general adjustment for periods of up to 3 years after discharge we believe it is too early to draw definitive conclusions about the success or failure of treatment.

CONCLUSIONS

We believe that the treatment of anorexia nervosa requires a humane approach in which the patient is accepted as a unique individual. Treatment should be predicated on a sense of optimism and on a conviction that the patient wants to get well. Both the physiological and psychological needs of the patient must be met in a treatment situation in which the therapist allies himself with the patient's healthy defenses and desire for constructive growth and autonomy.

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Neuropsychological and EEG Disturbances in Polydrug Users

BY IGOR GRANT, M.D., AND LEWIS L. JUDD, M.D.

EEG and neuropsychological evaluation of 66 polydrug users revealed that 43% had EEG abnormalities and 45% had neuropsychological impairment 3 weeks after admission to a polydrug study unit. At 5-month follow-up, 27% of 30 retested subjects were still impaired neuropsychologically. Impairment may be related to extensive involvement with sedatives, alcohol, or heavy polydrug use. The authors suggest that cerebral dysfunction in polydrug users might be the result of organicity of intermediate duration and that deficits may be experienced by some beyond 5 months of reduced use or abstinence. Organicity may dictate structured, reality-based intervention techniques, especially early in treatment.

THE CONTINUED ABUSE of psychoactive drugs by a significant minority of our population has raised the possibility that at least some users might suffer consequent brain damage. Although there has been much speculation, carefully conducted studies have been few, and the results have been contradictory. For example, the suggestions by Kolansky and Moore (1, 2) and Campbell and associates (3) that marijuana might cause brain damage have not been supported by the work of Mendelson and Meyer (4), Rubin and Comitas (5), Grant and associates (6), or Culver and King (7). Similarly, although adequate methods to assess cerebral function were used, five neuropsychological investigations of LSD users yielded contradictory results (8–12). Perhaps our best information so far relates to alcohol, which is clearly associated with cerebral dysfunction in at least some continual users (13–17).

The lack of objective information regarding the long-term effects of chronic abuse of barbiturates and nonbarbiturate sedative drugs on brain function is particularly striking since the abuse of such substances is a serious and growing problem (18, 19). We have been engaged in a comprehensive longitudinal study of "polydrug" abusers whose primary modal pattern of drug abuse is with central nervous system depressant drugs. In this paper, we will describe the preliminary results of the neuropsychological and electroencephalographic assessments in a sample of 66 polydrug abusers; these results represent one aspect of information being gathered on more than 120 subjects over a 2-year period as a part of a comprehensive polydrug treatment demonstration project sponsored by the National Institute on Drug Abuse.

METHOD

The first subjects admitted to the project were 36 men and 30 women ranging in age from 14 to 54 years (mean=26.3±8.5) and in education from 7 to 16 years (mean=11.8±2.2). Written statements of informed consent were obtained from all subjects after the details of the experiment had been carefully explained to each subject individually. The drug experience of the subjects is summarized in table 1. Since most of our subjects reported using virtually every type of drug at some time during their lives, the figures in table 1 represent heavy use only. For our purposes, "heavy use" is defined as the equivalent of daily experience with a substance for 1 year or more, except for hallucinogens and volatiles, where 100 or more total experiences constituted heavy use. The most frequent substances of abuse (used by 79% of the subjects) were drugs of the sedative-hypnotic class, including barbiturates, nonbarbiturate hypnotics, and minor tranquilizers (meprobamate, chlordiazepoxide, and diazepam). Fifty percent of the subjects were heavy users of stimulant drugs (amphetamines), and over 50% reported heavy and prolonged experience with three or more substances; these percentages indicate that this was a truly polydrug-abusing group.

At the time of their admission to the Polydrug Study Unit, an ambulatory facility in the downtown San Diego area, all subjects underwent an initial set of assessments, which included the gathering of a personal history, drug use information, medical history, a physical examination, and routine laboratory studies, including blood and urine toxicology. Most subjects continued as outpatients, although a few (less than 10%) were admitted to an inpatient unit for detoxification from sedative dependence. To allow acute drug effects

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TABLE 1
Drug Experience of 66 Polydrug Users

Substance	Heavy Users	
	Number	Percent*
Sedatives, hypnotics, minor tranquilizers	52	79
Stimulants (including amphetamines, anorexigenics, and methylphenidate)	33	50
Marijuana	24	36
Narcotics (including codeine)	20	30
Alcohol	17	26
Hallucinogens	14	21
Cocaine	1	2
Volatiles	1	2
Use of three or more substances	35	53
Intravenous use of any substance	40	61

* Total adds up to more than 100% because many subjects are classified as heavy users of more than one substance.

and effects of possible abstinence phenomena to clear, 3 weeks elapsed before the subjects received a comprehensive neuropsychological evaluation and EEG. Repeat EEG and neuropsychological testing were performed 5 months later.

The neuropsychological examination consisted of the battery of tests assembled by Reitan (20), which includes seven Halstead tests, the Wechsler Adult Intelligence Scale (WAIS), the trail making test, an aphasia screening test, a sensory perception examination, a lateral dominance examination, measurement of strength of grip, and the MMPI. The testing took 4–5 hours, and the results were analyzed both actuarially (psychometrically) and clinically. The EEG was performed on the same day or within 24 hours of neuropsychological assessment. Routine montage was employed, and the examination included periods of activation by hyperventilation and photic stimulation. The results were scored clinically by an electroencephalographer using the Mayo system (21) and were also recorded on magnetic tape from which a computerized, compressed spectral array could be plotted.

RESULTS

Initial Testing

The initial neuropsychological test protocols for each of the 66 subjects were evaluated by a clinician experienced in neuropsychological assessment (I.G.).[1] Of the 66 protocols, 30 (45%) were judged on clinical grounds to be neuropsychologically impaired. The majority of the protocols classified as abnormal were judged to be mildly to moderately so, with evidence of generalized, nonlateralized cerebral disturbance. General areas of deficit included difficulties in abstracting ability and problems in perceptual-motor tasks. Interestingly, general intelligence, memory, and verbal skills were not found to be abnormal in most of the subjects. EEGs were completed on 60 of the subjects. All EEG records were reviewed by an experienced electroencephalographer (Reginald Bickford, M.D.), and 26 (43%) were judged to be abnormal. According to the Mayo scoring system, 60% of the abnormal EEG records were classified as dysrhythmia I and 35% as dysrhythmia II. Other specific EEG abnormalities included excessive slowing in 50% of the subjects, with 3- to 4-cps or 6- to 7-cps bursts, spikes or spike wave complexes in 35%, and excessive fast activity in 12%.

There was a 75% agreement rate between the independently rated neuropsychological protocols and EEG results for the 60 subjects. Twenty-six individuals were rated normal and 19 were rated abnormal by both methods of inference. Disagreements occurred in 15 cases (25%); 7 individuals were regarded abnormal by the electroencephalographer and normal by the neuropsychology rater, and 8 individuals were judged to be neuropsychologically abnormal but normal on the EEG. These results indicate that the rate of cerebral dysfunction among polydrug users 3 weeks after admission ranges from 32% to 57%, depending on whether one or both methods of assessment are employed in making the diagnosis.

Neuropsychologically impaired subjects did not differ from unimpaired subjects in regard to age, sex distribution, education, or medical history. In particular, history of head injury did not separate the two groups. A comparison of the drug use experience of subjects judged to be normal and abnormal on both EEG and neuropsychological grounds showed an association between dysfunction and the following types of drug use: heavy CNS depressant use ($\chi^2=6.55$, $p<.02$); heavy alcohol use ($\chi^2=4.07$, $p<.05$); and heavy use of four or more psychoactive substances ($\chi^2=5.55$, $p<.02$).

Assays for serum levels of sedatives, narcotics, and amphetamines are available for 43 of the 66 subjects. Of the 12 subjects who had measurable amounts of barbiturates in their blood, 6 were judged to have neuropsychological deficits (serum barbiturate=0.5–3.3 mg/100 ml) and 6 were unimpaired (serum barbiturate=0.1–.3 mg/100 ml). Of the subjects with no detectable drugs in their blood, 12 were classed as impaired and 19 as normal.

Follow-Up

When repeat neuropsychological evaluations were completed at 5 months on 30 of the original 66 subjects (45%), 8 subjects (27%) were judged to have evidence of cerebral deficits; 7 of these 8 subjects had also been judged to be impaired at initial testing. One woman who had an intercurrent head injury was initially tested as unimpaired and, understandably, was impaired at retest.

EEG information is available on 20 of the 30 follow-up subjects. The neuropsychologist and the electroen-

[1]Dr. Grant received training in the neuropsychological laboratory of Ralph Reitan, Ph.D. They established an agreement rate of 80% in independent clinical ratings of neuropsychological protocols as part of a previous study (21).

cephalographer agreed in 17 cases (85%), and disagreed in 3 cases (15%). Thirteen subjects were normal both on EEG and neuropsychological examination. Thus, the rate of cerebral dysfunction at follow-up in the 20 patients who had both EEG and neuropsychological assessments ranges from 20% to 35%, depending on strictness of diagnostic criteria. The follow-up sample size is, at this point, too small to discern any possible interactions between drug use history and persistent cerebral dysfunction. In general, individuals reported considerably less involvement in drug abuse at 5-month follow-up than at time of admission. For example, 60 of the 66 initial subjects (91%) were judged to be heavy users of at least one substance when they enrolled in the program. At follow-up, 13 of the 30 returning subjects (43%) were classified as heavy users. There does not appear to be a causal association between interim or acute drug use and continued evidence of impairment. Twenty-four of the subjects (including all 8 individuals with neuropsychological deficit) had blood toxicological screening on the day of retest, and no measurable amounts of barbiturates, amphetamines, or narcotics were found in any subject.

The reasons, in order of importance, that 36 of the original 66 subjects were not retested were refusal to participate in follow-up retest, relocation out of state, and incarceration in jail. Two individuals committed suicide (3% of the initial sample). The subjects who were not retested do not appear to differ from those who were on the basis of age, sex, education, history of drug abuse, and initial neuropsychological status.

DISCUSSION

The subject sample was evenly divided between men and women and represents a wide range in ages and educational experience. In general, the group appeared to be a very representative sample of drug abusers in whom drug use played a highly significant role in all aspects of their social and psychological functioning. The group's drug use history is impressive—even with rather stringent criteria for defining heavy use (i.e., daily experience for a year or more), the majority of the subjects were so classified. The great majority abused CNS depressant drugs, and a significant portion of the sample reported heavy use of three or more drugs.

A surprisingly large number of subjects had abnormalities significant enough on their neuropsychological and EEG protocols (45% and 43% of the subjects, respectively) to be suggestive of a cerebral dysfunction 3 weeks after admission to the project. The rates of neuropsychological impairment were considerably higher than those we have observed among age- and education-matched medical patient nondrug users (11% to 26%) (22) and exceed the usually quoted EEG abnormality figures for the general population (10%) (23, 24). The high level of agreement between the neuropsychological evaluation and the EEG results is encouraging and adds further validity to the presence of cerebral dysfunction since the abnormalities were manifested in both of these independent assessment procedures.

The study design was not prospective in nature, and therefore we do not have baseline neuropsychological or EEG studies on individuals before their drug use. We can only speculate on what portion of these individuals would have been judged to be abnormal regardless of intercurrent drug use. Thus, one can only generalize about the relationship between heavy drug use and cerebral deficits. Nevertheless, aspects of the data give some indication that there may be a relationship between heavy drug use and presence of these abnormalities on neurological assessment. Neuropsychological impairment among our subjects was not related to age or education, but there was an interaction with three drug-use conditions (heavy alcohol use, heavy sedative use, and heavy use of four or more drugs). In addition, the types of deficits noted correspond remarkably to the impaired abstracting ability and visual-spatial integration disturbances reported by Fitzhugh and associates (13, 14), Goldstein and Shelly (15), and Jones and Parsons (16, 17) in their studies of chronic alcoholics. It would be inappropriate to infer from these preliminary observations that chronic sedative users develop brain disorders similar to those of alcoholics. Nevertheless, the neuropsychopharmacological similarity of the sedative drugs to alcohol, coupled with the finding of similar cerebral deficits, suggests that the question of long-term neurotoxicity of sedatives demands active exploration.

Another factor in interpreting the data in this subject sample is whether or not the results were altered by the effects of acute drug intoxication. In order to control for this, all subjects were clinically screened before the neuropsychological and EEG procedures. It soon became clear that the empirical evidence of intoxication in a chronic user was much less demonstrable than we had anticipated. At this point, a blood and urine toxicology screen was initiated as an objective measure of whether or not the subject was under the influence of any drug. Six subjects had what would be considered clinically significant serum barbiturate levels, and all 6 were judged to have neuropsychological deficits. Therefore, it is most likely that the neuropsychological deficits in these 6 individuals are more directly related to the effects of acute ingestion than to any chronic cerebral dysfunction. Of the 37 subjects who had only trace amounts of barbiturates (N=6) or had no detectable barbiturate levels in their serum (N=31), 12 had neuropsychological protocols that were judged to be definitely impaired.

Although acute drug effects were not operating in these 37 individuals, the deficits might still be the result of organicity of intermediate duration caused by abstinence from alcohol or sedative drugs. Indeed, this is the most likely explanation for the drop from 46% neuropsychological impairment at initial testing to

27% at 5-month retest. Of more interest is the fact that, with the exception of an individual who suffered a head injury between testings, all subjects who appeared impaired at retest were also abnormal initially. Our interview data failed to reveal any differences in intercurrent drug or alcohol use between the subjects who improved and those who did not; this may indicate that certain cognitive deficits may be more persistent or chronic in nature. An 8-month follow-up currently in progress should help distinguish intermediate-length, slowly reversible effects from permanent cognitive impairment. As follow-up data continue to accumulate, we believe that enough objective information will be available to make a more definitive statement regarding long-term CNS effects of heavy polydrug involvement.

CONCLUSIONS

The fact that few cerebral deficits were demonstrated by the standard adult intelligence scale is an indication that these changes are not obvious and require a rather sensitive assessment procedure. It appears from this study that EEG and the neuropsychological battery assembled by Reitan are mutually enhancing and may, in combination, add considerable sensitivity and sureness to the identification of subtle cerebral deficits, an area that has long been a diagnostic problem. The fact that almost half of our polydrug users could be classified as "organic" during their early weeks in treatment may explain some of the inattention, distractibility, unreliability, lack of motivation, and "denseness" so often described and so frustrating to therapists. This finding also suggests that a very clear, more simply structured, reality-based intervention might be the treatment of choice and have the potential to reduce the proneness to treatment failure so often seen with polydrug abusers.

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A Description and Evaluation of an Outpatient Intensive Psychotherapy Center

BY WENDELL M. SWENSON, PH.D., AND HAROLD R. MARTIN, M.D.

The intensive psychotherapy center described and evaluated in this paper is unique because of its intensity and the fact that available treatment modalities are integrated into the program. Patients are literally immersed in therapy on a full-time basis for an average of 3 weeks. Assessment of the program through the use of questionnaires completed by 335 patients at the time of discharge showed significant improvement in their presenting symptoms, interpersonal relationships, ability to work, and general level of comfort. An 8-month follow-up study of 171 patients revealed that this improvement was retained.

SHORT-TERM INTENSIVE outpatient psychotherapy has been increasingly considered the treatment of choice for many psychoneurotic conditions and problems of interpersonal relationships in recent years. This is apparent in changes in some of the more traditional treatment programs (1, 2).

Nearly 8 years ago the Department of Psychiatry and Psychology of the Mayo Clinic developed a program of short-term intensive outpatient psychotherapy that has evolved pragmatically into the program we will describe and evaluate in this paper.

DESCRIPTION OF PROGRAM

The Mayo Clinic program is unique, not primarily because it contains new psychotherapeutic techniques, but because of its intensity and the manner in which available therapeutic modalities are interwoven. The patients selected for treatment at the Intensive Psychotherapy Center (IPC) represent a broad spectrum of neuroses, personality disorders, and psychophysiological disorders. Most come to the clinic just as they would consult a general physician or another medical institution, i.e., for problems that are later found to be psychoneuroses or difficulties in interpersonal relationships. Treatment at the IPC is a full-time experience 5 days a week for 2 to 5 weeks (average, 3 weeks).

The therapeutic techniques integrated into this program include group psychotherapy, examination of videotaped group interaction facilitated by an "objective" or uninvolved observer, individual psychotherapy, psychodrama and other encounter techniques, activity therapy, and a form of conjoint family therapy that usually involves the patient's spouse.

These several treatment modalities and therapeutic approaches are integrated and interrelated primarily through the manner in which the clinic personnel are used. A psychiatric resident and a cotherapist (usually of the opposite sex), as a team, constitute the patient's therapists. They are involved in or responsible for each patient's daily therapeutic experiences. The treatment unit has basically the same patient-therapist composition during the entire treatment period and comprises the patient's "home group," even though the patient may be temporarily involved in other experiences (e.g., encounter groups or activity therapy). The total program includes three treatment teams. In this varied but cohesive treatment milieu, a typical day at the center is characterized by constant feedback, exchange of opinions, and discussion of the dynamics of the day's therapeutic experiences. Through this design, therapeutic content dealt with in any one session in a given day is automatically funneled into the other sessions of that day.

On arrival at the IPC a new patient is assigned to one of the three treatment teams; he or she thus joins an established home group. Each group contains 7 to 8 patients. The heterogeneity of the patient groups is guaranteed because the only conditions for admission are the consulting psychiatrist's impression that the patient has met previously identified diagnostic criteria and that he or she might benefit from short-term intensive psychotherapy. This heterogeneity was confirmed by data after 1 year of operation showing that the age of patients ranged from 18 to 66 years (modal age group, 30 to 40 years). About 45% of the patients were men, and 55% were women. Educational levels ranged from less than eighth grade to postgraduate or professional degrees. Socioeconomic levels were commensurate with educational achievement.

A typical day for one group of patients illustrates the

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TABLE 1
A Typical Day at the IPC

Time	Group 1	Groups 2 and 3
8:00 a.m.	Staff meeting; new patients introduced to staff*	Staff meeting; new patients introduced to staff*
9:00 a.m.	Home group psychotherapy	Home group psychotherapy
10:00 a.m.	Videotape replay of preceding session with objective observer	Individual psychotherapy with primary therapist
	Therapist and cotherapist review session in different room with supervising psychiatrist	Activity therapy with cotherapist Audiotape replay of previous session
11:00 a.m.	Psychodrama or other encounter techniques	Psychodrama or other encounter techniques
	Individual psychotherapy with primary therapist	Individual psychotherapy with primary therapist
	Activity therapy with cotherapist	Activity therapy with cotherapist
Noon	Lunch*	Lunch*
1:00 p.m.	Home group psychotherapy	Home group psychotherapy
2:00 p.m.	Videotape replay of psychodrama	Videotape replay of psychodrama
	Activity therapy with cotherapist	Activity therapy with cotherapist
	Individual therapy with primary therapist	Individual therapy with primary therapist
3:00 p.m.	Summary group*	Summary group*

* All groups meet together for these activities.

character of the program (see group 1, table 1). At 8:00 a.m. a staff meeting is held during which administrative problems are dealt with, clinical issues are discussed, and any new patients coming to the center are greeted briefly. At 9:00 a.m. the home group meets with its therapist and cotherapist for the first group therapy session. At 10:00 a.m. there is a videotape replay of the preceding hour's group psychotherapy with an objective analysis of the group interactions by a previously uninvolved member of the staff. During this hour the primary therapist and cotherapist of the group meet with the supervising psychiatrist for a review of their observations of the session. At 11:00 a.m. half of the patients meet for psychodrama or other encounter groups. (Members of other groups may be included.) At noon, all of the patients in the IPC have lunch together. At 1:00 p.m. a second group therapy session is scheduled with the home group. From 2:00 p.m. to 3:00 p.m. the patients are available for individual psychotherapy, traditional activity therapy, or videotape replay of the psychodrama. From 3:00 p.m. to 3:30 p.m. the entire patient population from the three groups meets with the three resident psychiatrists and the three cotherapists for a "summary group" to go over the day's encounters.

All of the group sessions are recorded on audiotape; these are frequently used by the patients during the activity therapy periods to reexamine the past hour. Other techniques such as "mini-marathons" (5 hours) are occasionally used when the therapists feel the group may benefit from such an approach.

An important characteristic of the program is the frequent use of conjoint therapy in which a spouse or other relative is included in the total program. We have found that this is frequently crucial even when overt marital problems are not initially apparent.

CASE REPORTS

The following examples are presented to illustrate the manner in which material from one treatment modality feeds into another and how the differing treatment approaches supplement and complement each other to produce continuity that ties the treatment program together.

Case 1. A 40-year-old attorney attended the IPC with his wife. She and others in the group recognized that his passive-dependent "fatherly" relationships with women were actually a means of seductive manipulation, although he remained unconvinced. In psychodrama, a conflict situation was constructed in which he had to deal with two attractive young women. Feedback from the patient group and his coparticipants in the drama and the videotape allowed him to see clearly for the first time his pattern of seduction. After this he was able to examine his relationship with women generally, including his daughters, and two earlier extramarital affairs in which he had seen himself as a "victim of circumstances."

Case 2. A 20-year-old hostile-dependent woman had worked through the dynamics of many of the neurotic symptoms that had brought her to the IPC. However, it was only when she saw herself isolated in the sociograms of one of the encounter sessions that she recognized the distance between her and the other group members and began to feel her own loneliness. She was able to ask for and received feedback from the other patients regarding the anger and condescension they felt she projected in spite of her superficial mask of warmth and caring. Although she reacted very little at the time, her cotherapist found her crying later in the day. She then revealed her anger and hurt and went on to abreact her relationship with her father. This reaction continued into the summary group, in which she related this smoldering anger and her defensive manner toward people in general. The following morning she was able to continue her therapy on a deeper plane.

EVALUATION

Two of the most difficult problems in psychiatry are evaluation of results and comparison of treatment methods. To quantify such abstract phenomena as anxiety, tension, depression, maladaptive behavior, interpersonal conflicts, or pain from tension is often considered to be a virtually impossible task. Nevertheless, it is important that an attempt be made to measure results in as objective and quantified a manner as possible.

To determine the effectiveness of the IPC, we developed a questionnaire to obtain information regarding behavioral and attitudinal changes of patients attributable to this experience. This questionnaire and certain standard psychometric devices (the MMPI, the Adjective Check List [3], and the Shipley-Institute of Living Scale for Measuring Intellectual Impairment [4]) were administered routinely to 315 patients admitted to the IPC. The patients were also evaluated by means of standardized questionnaires completed by the psychiatric resident and the cotherapist on admission and discharge. (Results of these analyses will be published later.)

On admission the patients identified their primary, secondary, and tertiary symptoms (see table 2). (Fifty patients entered the IPC with their spouses at the latter's request and saw themselves as having no symptoms.) The patients filled out a second form of the questionnaire upon completion of therapy.

Approximately 8 months after discharge from the IPC, the patients were mailed a third form of the questionnaire to determine once again any change in their symptoms or their disability. Of the 315 patients in the study, 171 cooperated in this follow-up.

Table 3 contains data demonstrating the self-assessed status of the patients at admission and discharge. At the time of discharge there were no large

TABLE 2
Primary Symptoms Described by 315 Patients at Time of Admission to the IPC

	All Patients (N=315)		Patients in Follow-Up Group (N=171)		Patients Not in Follow-Up Group (N=144)	
Symptom	Number	Percent	Number	Percent	Number	Percent
Dysphoria	136	43.2	70	41.0	66	45.8
Somatic symptoms	90	28.6	54	31.6	36	25.0
Behavior problems	3	0.9	3	1.8	0	—
Interpersonal relationships (family)	33	10.5	17	9.9	16	11.1
Interpersonal relationships (other than family)	3	1.0	2	1.2	1	0.7
None	50	15.8	25	14.6	25	17.4

TABLE 3
State of Primary Symptoms Described by Patients at Time of Discharge and at 8-Month Follow-Up

	All Patients (N=265)*		Patients in Follow-Up Group (N=146)*		Patients Not in Follow-Up Group (N=119)*	
State of Primary Symptom	Number	Percent	Number	Percent	Number	Percent
At time of discharge						
Worse	6	2.3	1	0.7	5	4.2
Same	34	12.8	15	10.3	19	16.0
Mild improvement	16	6.0	12	8.2	4	3.4
Moderate improvement	95	35.8	55	37.7	40	33.6
Substantial improvement	73	27.5	42	28.8	31	26.1
Total improvement (absence of symptom)	41	15.5	21	14.4	20	16.8
At follow-up						
Worse	—	—	13	8.9	—	—
Same	—	—	14	9.6	—	—
Mild improvement	—	—	14	9.6	—	—
Moderate improvement	—	—	32	21.9	—	—
Substantial improvement	—	—	38	26.0	—	—
Total improvement (absence of symptom)	—	—	35	24.0	—	—

* Fifty patients saw themselves as having no symptoms at time of admission.

TABLE 4
Self-Ratings of Severity of Disability of 315 Patients Before and After IPC Treatment*

Item	Ratings of Severity of Disability at Discharge									
	Patients in Follow-Up Group (N=171)					Patients Not in Follow-Up Group (N=144)				
	1	2	3	4	5	1	2	3	4	5
Ratings of severity of disability in terms of discomfort at time of admission										
1	22	9	4	1	0	11	4	5	0	1
2	7	4	3	1	0	2	5	4	2	0
3	8	20	25	1	0	17	17	16	1	3
4	2	10	19	4	1	1	8	10	3	0
5	3	9	12	4	2	5	10	8	5	6
Ratings of severity of disability in interpersonal relationships at time of admission										
1	19	10	6	1	1	8	3	3	1	5
2	4	15	3	0	0	10	7	5	1	0
3	12	26	14	3	1	11	19	14	2	4
4	4	12	8	0	2	2	11	7	0	0
5	4	7	17	1	1	4	10	12	3	2
Ratings of severity of disability to work at time of admission										
1	52	5	1	0	0	35	7	3	0	2
2	8	14	3	1	0	5	3	3	0	0
3	11	16	15	0	0	11	11	13	4	2
4	4	11	4	1	0	6	6	6	1	0
5	4	5	11	2	3	5	8	7	3	3

* 1=none; 2=mild; 3=moderate; 4=moderately severe; and 5=severe.

differences between patients who subsequently completed the follow-up questionnaire and those who did not. The modal change for all patients seemed to be moderate improvement (95 patients, 35.8%). However, in the total group and in each subgroup, more than 40% admitted substantial improvement or total absence of their primary complaint. On the other hand, 15% felt they had deteriorated or experienced no improvement. For the 146 patients who stated that they had an initial symptom and completed the follow-up questionnaire, treatment had some lasting effect for at least 8 months. Of these patients, 50% indicated that their complaint had either totally disappeared or continued to show substantial improvement. About 19% felt they had deteriorated or made no improvement.

All of the patients also rated their general feelings of discomfort, problems of interpersonal relationships, and ability to work efficiently (see table 4). In general, considerable improvement occurred in each of the three categories of functioning. At the time of discharge the patients were experiencing less general discomfort, were having less difficulty in interpersonal relationships, and were feeling better able to engage in their work. These results are statistically significant (two-tailed t test, $p < .01$). There were no significant differences between the group of patients who answered the 8-month follow-up questionnaire and those who did not.

CONCLUSIONS

A treatment program in which a broad spectrum of patients with psychoneuroses and personality disorders were literally immersed in therapy on a full-time basis 5 days a week for 2 to 5 weeks resulted in relief of presenting symptoms and of general discomfort and improvement in the ability to work and effectiveness in interpersonal relationships in a significant percentage of patients. An 8-month follow-up revealed that some patients had retained their level of improvement, others had partially relapsed, and others had continued to improve; therefore, as a group they had essentially retained the level of improvement that they had shown at the time of discharge.

It is our opinion that the key factors in the success of this program are, first, its intensity and, second, the manner in which several differing psychotherapeutic modalities and techniques are interwoven.

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Quality-of-Care Standards and Professional Norms

BY HERBERT C. SCHULBERG, PH.D.

Incursions upon professional prerogatives are increasing with the advent of new requirements for accountability; this has stemmed in part from the government's enlarged role in paying for mental health services. The author discusses the effect of professional norms on the assessment of quality of care, including the concepts of risk and autonomy, observability and privacy, the perspective of time, and the appropriateness of the penalty. He offers some suggestions for the design and implementation of quality-of-care standards that he believes will benefit both professionals and administrators, as well as protect the patient.

THE CLINICAL PRACTICES of most psychiatrists have been directly or indirectly affected by increased requirements for accountability. Limitations on hospitalizing nondangerous patients have resulted from the Supreme Court's decision in *O'Connor v. Donaldson*, standards of treatment were altered by the *Wyatt v. Stickney* judicial decision, and time-limited outpatient care is often necessitated by the benefit structure of health insurance plans. Thus decisions about who is to be treated, with what methods, and for how long—which have traditionally been professional decisions—are now within the purview of nonprofessional control agents.

Incursions upon professional prerogatives are escalating. Citizen efforts to assure quality care tend to reject the premise that physicians are fundamentally humanitarian helpers who do no harm. The present crisis vis-à-vis medical malpractice insurance bears out the power of consumer interests. Third-party payers also have the power to influence service and its quality. It was reported recently that a major insurance carrier had sought a cutback in psychiatric benefits not only because of rising costs but also out of a concern for the relative lack of scientific rigor in regard to psychiatric diagnostic and treatment decisions (1).

Finally,and perhaps most significantly, there are pressures for quality control stemming from the government's enlarged role in paying for mental health services. The government requires disclosure of the purposes of expenditures and audits those expenditures to determine what the results have been; the same principle is now being applied to psychiatric programs. Although Professional Standards Review Organizations (PSROs) are currently limited to reviewing inpatient services, Goldstein and Cohen (2) speculated that their authority will be extended to other essential services as well.

Instead of assuming the initiative, mental health professionals generally respond in a reactive way to pressures for greater quality control. More stringent standards are usually adopted only after dubious practices evoke adverse publicity. For example, complaints by patients and their families were at least as forceful as professional distress in leading the Massachusetts Department of Mental Health to organize the Task Force to Study and Recommend Standards for the Administration of Electro-Convulsive Therapy (3).

The growing use of bureaucratically administered standards to assure the quality of psychiatric care conflicts in many ways with findings in the sociological literature that the professional's work suffers when detailed directives are passed down by administra-

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The papers in this section are grouped around a specific topic. Publication here does not, however, imply that the Editor considers this material to constitute a comprehensive analysis of the topic.

tors (4). Individuals unable to control their work tasks are frequently found to be less satisfied with their jobs than persons who possess this power. Professionals have been viewed as functioning best in a "company of equals," which enables them to pursue organizational goals within a framework of ethics and controls learned from and shared with colleagues.

Why is this sociopsychological perspective on the optimal professional work environment being increasingly ignored? There are several possible reasons. Admirable as the sociopychological perspective may be, it fails to reconcile the continuing tensions among organizational values, goals, and professional work styles. For example, hospital administrators structure clinical services so as to maintain a balanced organization, but clinicians frequently plead for exceptions to rules in treating the patients for whom they are responsible. Similarly, the administrator's value system legitimates cost-benefit analysis and emphasizes fiscal solvency. Clinicians, on the other hand, often disdain cost-benefit considerations and cite the humanitarian value of psychiatric care regardless of its cost.

Within a framework of competing values, goals, and needs, quality control through the setting of standards can be viewed as the imposition of subjective values in the guise of pseudoscientific knowledge (5). Alternatively, standard setting can be seen as an effort to reconcile finite resources and infinite objectives (6). Since the resolution often involves compromise—settling for the immediately achievable rather than holding out for distant ideals—adopted standards may leave both psychiatrists and consumers dissatisfied.

Quality-of-care standards are also important to administrators who use them as control mechanisms in coordinating diverse staff behaviors (7). Procedures for controlling psychiatrists can be designed in various forms, some explicit and others implicit, some based on rewards and others on punitive measures. The use of explicit evaluation procedures based upon empirical standards is a growing trend, and if it continues, direct observation of patient care practices rather than assumptions based upon clinical reports will determine the psychiatrist's rewards and penalties.

CATEGORIES OF EVALUATION

As the mental health field is being forced to specify quality-of-care standards, it is struggling to refine appropriate evaluative criteria. Schulberg and associates (8) have emphasized that the choices depend upon many variables, including the specificity of an organization's goals and the feasibility of measuring them. Mental health centers often have nebulous goals and problematic assessment procedures. Consequently they evaluate organizational effort rather than patient outcome. Quantifiable indices of staff activity are readily established and include: 1) volume of service, 2) time per service, 3) cost per service, 4) administrative controls, and 5) professional qualifications. Any one (or a combination) of these indices can become a standard to be emphasized in utilization review and/or medical audit.

Specific standards usually are negotiated by the parties concerned in relation to the particular interests and needs of each. Outcome studies to determine whether patients have actually benefited from psychiatric efforts have been few, since measurable criteria are lacking. Thus in designing evaluations administrators and clinicians emphasize staff activities; indices of benefits to the patient are more difficult to design and usually are ignored in setting standards.

The clinical checklists and criteria developed by the Yale Psychiatric Utilization Review and Evaluation Project (9) for evaluating patient care are examples of the types needed in the psychiatric field. Using systems concepts, the Yale project sought to include structural, process, and outcome approaches in the review of patient care. The systems perspective is incorporated within checklists utilized 1) for the review of treatment provided suicidal patients, 2) in outcome studies with schizophrenic patients, and 3) in reviewing consultation activities.

Regardless of whether standards simply measure professional activity or in a more complex way assess patient outcome, psychiatrists generally prefer that standards be derived empirically through a continuous survey of local practice. Normative standards established by experts at the national level or by governmental bodies are less acceptable, particularly if they emphasize nonclinical concerns. However, the psychiatric leadership is seeking to bridge gaps between empirical and normative standards of care. The American Psychiatric Association has distributed guidelines for quality of care (10) that can be modified locally by the PSROs responsible for establishing standards applicable to their own areas.

Patient care can be assessed in relation to standards prospectively, concurrently, or retrospectively. Not surprisingly, prospective utilization reviews are most commonly performed with professionals in training, while experienced professionals find them most repugnant. It must be emphasized that evaluating psychiatric effort (prospectively, concurrently, or retrospectively) on the basis of standards rests upon the premise that prescribed levels of clinical activity produce beneficial outcomes. To the degree that this premise is untested or untenable, conformance to standards is meaningless and even misleading.

PROFESSIONAL NORMS

Since standards increasingly determine the assessment of quality of care, it is important to consider how professional norms either reinforce or resist this development. Norms represent guidelines by which practitioners determine the range of behavior appropriate and applicable to particular situations (11). When a new standard conflicts with long-established norms,

psychiatrists are challenged by both its pragmatic and symbolic implications. Pragmatically, a new standard may upset the clinician's customary work habits; symbolically, it can violate his/her self-image and sense of personal power over daily activities. It is not surprising, then, that the most controversial standards are those which clash with professional norms.

The psychiatrist's norm for evaluating clinical practice has traditionally legitimated assessment procedures that have been professionally devised and controlled. For example, ethics committee members monitor the practice of fellow psychiatrists and impose sanctions when indicated. They utilize clinical criteria rather than nonclinical criteria such as monetary costs in arriving at judgments, and they shield their findings from the scrutiny of administrators and clients, often giving as the reason the need to protect patient confidentiality. The remainder of this paper will consider these and other elements of the normative system that have long guided psychiatric practice in relation to quality-of-care assessment on the basis of newly emerging standards.

Risk and Autonomy

The professional's conception of the appropriateness of clinical practice stems primarily from his/her daily work experiences. Psychiatrists, for example, must assume critical risks in determining whether a patient is suicidal or homicidal. Overly conservative judgment can produce excessive restrictions on the patient, exposing the clinician to a lawsuit alleging violation of the judicial principle of treating patients in the least restrictive manner necessary. On the other hand, laxity can result in serious injuries to the patient and/or others, again subjecting the clinician to a possible lawsuit charging negligence. In return for shouldering these responsibilities of judgment, psychiatrists feel entitled to considerable autonomy. The fact that often there is no single accepted way to resolve a clinical problem reinforces the claim of autonomy. Competing claims about the relative efficacy of psychotherapy and drugs in treating acute schizophrenics, for example, require that psychiatrists practice on the basis of scientific evidence that is less than adequate.

Unclear treatment choices leave professionals vulnerable; they therefore hesitate to use the abstract rules of standards in passing critical judgment on their peers. The greater the degree of risk and the more ambiguous the clinical intervention, the more tenaciously the professional clings to his/her autonomy and resists external standards. Most professionals remain unimpressed by the fact that externally imposed standards afford protection as well as encroachment on one's autonomy.

Observability and Privacy

A profession by definition lays claim to a complex, sophisticated body of knowledge that is transmitted to its practitioners only through an extended and intensive educational process. In fact, as Zusman (5) noted, an essential characteristic of a profession is its incomprehensibility to outside observers. Psychiatrists can maintain their mystique since most treatment occurs in the privacy of the practitioner's office. Although privacy is essential in guarding patients' rights, it also severely limits observation by nonprofessionals. It is within a framework of nonobservable, complex tasks that psychiatrists evaluate professional performance through peer review which emphasizes clinical criteria; nonclinical criteria such as cost effectiveness are usually excluded from the assessment process.

Peer review limits external scrutiny and maintains ingroup control over clinical practice, but it is fraught with limitations. Zitrin and Klein (12) noted that small peer groups of already busy volunteer psychiatrists lacking staff or funding cannot be expected to investigate and judge cases involving the reputations and professional careers of friends and colleagues. Between 1970 and 1974, an APA district branch ethics committee considered 44 complaints against members. In only two cases did the committee vote for a finding of unethical conduct; in many cases the committee felt the charges were more than justified but lacked sufficient proof to warrant a negative finding. Zitrin and Klein reported that some members of this ethics committee wondered whether the committee merely served as a buffer between the profession and the public, since it was without the resources, objectivity, and perhaps the will to do more.

In reaction to the limitations of the kind of peer review that utilizes veiled prototypes of clinical practice, there is a growing insistence that effective quality control utilize explicit and empirical standards comprehensible to both laymen and professionals. Furthermore, it is believed that these standards should protect the interests of consumers as well as practitioners. How, then, can psychiatric care be meaningfully assessed without violating patient confidentiality?

No easy answers are yet available, but the medical record is a window for observing the quality of patient care. Rather than being the private working tool of clinicians alone, the medical record can also be used for arriving at evaluative and fiscal decisions. By studying the clinical record, a fellow practitioner or carefully trained evaluator can reconstruct the course of treatment and estimate its quality.

A promising feature in this development is the pressure placed on clinicians to specify the patient's problems and the treatments appropriate to them. Problem-oriented records are widely used in medical-surgical care, but their application to psychiatric services is relatively recent (13, 14). A related technique for sharpening the clinician's statement of patient problems and treatment expectations is goal attainment scaling (15). Therapeutic progress is assessed in relation to each problem on a five-point scale, ranging from the best to the worst expected outcome.

Clinicians resist evaluation technologies for various reasons. These range from assertions that evaluation

produces impersonal, mechanistic care to contentions that psychiatric treatment is a subtle, unfolding process that cannot be circumscribed within delimited statements of problems and goals. The more long ranging and intensive the clinician's treatment orientation (e.g., psychoanalytic psychotherapy), the more uncomfortable he/she will be with evaluations requiring that goal statements be included in the medical record. The briefer and more targeted the clinician's interventions, (e.g., symptom reduction through psychoactive drugs or behavior therapy), the more comfortable he/she will be with assessments by means of records review.

Perspective of Time

As bureaucrats strive to evaluate clinical practice via standards, they must recognize that professionals expect delayed rather than immediate scrutiny. Friedson and Rhea (4) noted that the sharing of judgmental observations among colleagues is a slow and limited process. Since a critical mass of discontent is necessary before colleagues will complain to each other about a peer's errors, long periods of time elapse before widespread opinion emerges about a professional's work. Even then, complaints lodged with such professional control forums as ethics committees may require years for review and adjudication. Thus routine utilization reviews, particularly if they are performed prospectively, are likely to be resisted; retrospective audits, however, are more compatible with professional norms and thus are more easily implemented.

Appropriateness of the Penalty

Professionals judge the appropriateness of bureaucratically established penalties against the norm of peer-approved penalties. The sanction most commonly employed by physicians against colleagues is a "talking to"—an action whose frequency varies with status and social distance (4). Cajoling is practiced more often among middle-level peers and between seniors and juniors than among senior peers. Even when a clinician adopts the more serious sanction of excluding an errant colleague from patient referrals, this usually is done informally and individually, not by the profession as a whole. Only in extreme instances do professional groups undertake a collective action that will affect a member's basic livelihood, e.g., seeking revocation of a license or registration. Bureaucratic penalties that have fiscal implications, such as exclusion from eligibility for Medicare and Medicaid reimbursement, therefore encounter stiff professional resistance. Mild rebukes for low-quality care are much more consistent with prevailing patterns of collegial disapproval and are more readily tolerated by professionals.

IMPLICATIONS FOR STANDARD SETTING

Organizations with clear-cut structures and operating procedures enable professionals to be productive, to advance new interests, and to live securely. Paradoxically, an organization's social-order needs require that limitations and conformity be imposed upon personnel. Given this social reality, is it possible to minimize the potential conflict between organizational managers and professional staffs with regard to quality-of-care procedures?

Many assume that the amount of control available to a group or an organization is absolute and fixed; increasing the power of one sector would thus automatically decrease the power of other sectors. As administrators gain increased authority to participate in the review of the quality of care, professionals fear that their own autonomy will suffer. An alternative conception of power and control is that they are not absolute and finite. Tannenbaum (7) suggested that the total amount of control exercised by an organization varies—it can increase or decrease. Within this perspective, altered and strengthened quality-of-care standards need not inevitably lead to struggles between administrators and professionals. Depending upon the nature of the standards and their enforcement procedures, both groups may benefit or suffer.

If we assume that appropriate quality-of-care standards can benefit *both* administrators and professionals, how should standards of psychiatric practice be designed and enforced? By extrapolating from Friedson and Rhea's (4) analysis of self-regulation in a medical group practice and Bellin's (6) experience in establishing regulations for Medicare providers, it is possible to suggest the following:

1. Clinicians will more rapidly accept and function within quality-of-care standards when they have helped formulate them. Standards perceived as established by individuals or bodies not traditionally part of the professional's frame of reference are more likely to be resisted. Furthermore, if the standards generate controversy, ad hominem issues soon supersede intellectual discourse. Dorsey and Sullivan (16) have urged physicians to help design review methodologies so as to minimize such problems as unrealistic standards and record keeping as an end rather than a means.
2. As a routine article of faith, professionals deem their personal interests to be necessarily identical with those of their patients. To suggest otherwise attacks the premises upon which many of the clinician's practices are founded. Quality-of-care standards should therefore reinforce positive practices and emphasize the personal rewards to be gained from modifying less satisfactory practices.
3. Standards developed by or with professionals are more readily accepted by individuals trained, socialized, and functioning within the profession's normative system than by individuals not dependent upon colleagues for esteem and trust. Such bodies as PSROs can enforce standards among psychiatrists subscribing to peer group pressures. The leverage and sanctions of governmentally administered bureaucracies are necessary primarily to maintain standards among those un-

concerned with, or alienated from, a professional normative system.

CONCLUSIONS

Clinicians functioning within well-established norms feel their prerogatives being eroded by inappropriate demands for data; administrators consider traditional peer review procedures inadequate for assessing the quality of patient care. If current tensions escalate, the paradoxical result may be that clinicians will produce masses of data for reviewers while simultaneously reducing their commitment to patient care. The clinician's annoyance with bureaucrats because of the necessity to complete endless forms may be converted into passive-aggressive behavior toward patients. Those responsible for accommodating the competing needs of clinicians and administrators can forestall this ironic eventuality by recognizing that both clinical practice and evaluation constitute means rather than ends. They must foresake their current preoccupation with assessing process and view the evaluation of outcome as the framework of mutual concern.

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Mental Health Services in the Public and Private Sectors

BY LORRIN M. KORAN, M.D.

Analysis of data on mental health service providers indicates that in 1971 the private sector accounted for 34% of inpatient days, 86% of outpatient visits, 44% of expenditures by source of funds, and 51% of expenditures by receipt of funds. The author believes that mental health professionals must familiarize themselves with the economic interests influencing national health insurance proposals and with public policy making processes if they are to help preserve appropriate roles for the public and private sectors in mental health service delivery.

THIS ARTICLE is an attempt to provide more complete estimates of the volume of mental health services in the public and private sectors than have previously been available. Sharfstein and associates (1) have given the most extensive estimates to date. They limited their attention, however, to the public and private practice of psychiatry and did not consider mental health services rendered by other medical or mental health professionals in various settings. Moreover, as I will illustrate below, their estimate of outpatient visits to private psychiatrists was far too low. With national health insurance under debate and the extent of coverage of services for mentally disordered patients still unclear, a more complete estimate of the role of the private sector may benefit public policymakers and the public interest.

In 1975, Sharfstein and associates concluded that "there are no clear data available to permit adequate assessment of or definitive conclusions about the current relative roles of [psychiatry in] the public and private sectors, however defined, in the provision of mental health services" (1, p. 47).

The authors encountered several problems in their research. The exact numbers of psychiatrists in private practice and of persons under their care were not known. Moreover, some private practice psychiatrists also engage in part-time salaried practice in a public facility. In both the public and private sectors, the data on annual admissions and patient care episodes in mental health facilities were contaminated by duplications, i.e., patients treated in more than one setting in a year or treated more than once a year in the same setting. Finally, because public facilities receive private dollars (e.g., patient fees) and private facilities receive public dollars (e.g., Medicare), the boundary between the public and private sectors is blurred.

The analysis that I will present circumvents these problems in several ways. First, better estimates of the number of outpatient visits to private psychiatrists are now available. Second, the measures used to describe the volume of care—inpatient days, outpatient visits, and expenditures—do not depend on unduplicated counts of patients. Third, the boundary between the public and private sectors has been clarified by examining expenditures for mental health services by both recipients of funds and source of funds.

In order to build on the data assembled by Sharfstein and associates, I have examined mental health services delivered in 1971, the year they studied. A few of their estimates have been changed because better data are available. In addition, I have included data on services rendered by practitioners and facilities they did not study. No data are available, however, regarding some kinds of facilities, e.g., general medical clinics. Units of care have been apportioned according to the public or private ownership of the particular type of facility. For example, Sharfstein and associates assumed all federally funded community mental health centers (CMHCs) were in the public sector; in fact, only 45% were publicly owned (2). (However, 80% of CMHC funds were derived from government sources [3].)

THE MEASURES

Inpatient Days

Sharfstein and associates' estimate of inpatient days in residential treatment centers for emotionally disturbed children has been distributed according to the proportions of publicly and privately owned beds (4) (see table 1). Because CMHCs and residential treatment centers for disturbed children account for very small proportions of inpatient days, the redistributions do not result in substantial differences in the overall analysis. Estimates have been added for the number of inpatient days spent by mentally disordered persons in halfway houses, nursing homes, and personal care

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TABLE 1
Volume of Mental Health Care in the Public and Private Sectors in 1971*

Sector	Inpatient Days		Outpatient Visits	
	Number (thousands)	Percent	Number (thousands)	Percent
Public				
General hospital psychiatry units	2,178	0.8	1,219	1.8
Federally funded CMHCs	1,001	0.4	1,519	2.2
Halfway houses	160	0.1	—	—
Residential treatment centers for emotionally disturbed children	153**	0.1	—	—
Nursing and personal care homes	8,835	3.1	—	—
Freestanding outpatient clinics	—	—	3,206	4.6
State and county mental hospitals	95,584	33.9	2,171	3.1
Veterans Administration psychiatric hospitals	11,945	4.2	1,182	1.7
Public institutions for the mentally retarded	66,065	23.4	—	—
Federally employed internists and general practitioners	—	—	429***	0.6
Total	185,921	66.0	9,726	14.0
Private				
General hospital psychiatric units	4,794	1.7	1,661	2.4
Federally funded CMHCs	1,224	0.4	1,857	2.7
Halfway houses	1,768	0.6	—	—
Residential treatment centers for emotionally disturbed children	6,225	2.2	—	—
Nursing and personal care homes	77,781	27.6	—	—
Freestanding outpatient clinics	—	—	4,043	5.9
Private mental hospitals	4,293	1.5	506	0.7
Private practice psychiatrists	—	—	18,320	26.5
Private practice psychologists	—	—	2,757	4.0
Private practice internists and general practitioners	—	—	30,234	43.8
Total	96,085	34.0	59,378	86.0
Total	282,006	100.0	69,104	100.0

* Data are from Sharfstein and associates (1) unless indicated otherwise in table or text.
** 2.4% of government-owned beds multiplied by inpatient days from Sharfstein and associates.
*** 1.42% of outpatient visits to private practice internists and general practitioners (10).

homes and by mentally retarded individuals in public institutions for the mentally retarded.

In 1971, halfway houses serving the mentally disordered had 6,170 beds, with an occupancy rate of 85.6%. Only 8.3% of the beds were in government-owned halfway houses (5).

There were 1,073,000 residents in nursing and personal care homes in 1971 (6). The average daily census is assumed to have been 5% less than this. According to preliminary tabulations from the National Center for Health Statistics (NCHS) 1973–1974 nursing home survey, 9.64% of residents had a primary diagnosis of mental disorder and 13.64% had a primary diagnosis of senility (7). Thus 23.28% of all inpatient days and expenditures in these homes have been attributed to mental disorders. This is a conservative estimate (7); if one includes both primary and other diagnoses, 18.65% of residents were impaired by mental disorders other than senility and 58.34% were senile. Only 10.2% of beds in nursing and personal care homes were in government-owned homes (8).

In 1971, public institutions for the mentally retarded had an average daily census of 181,000 persons, or 65,065,000 inpatient days per year (6).

Outpatient Visits

Sharfstein and associates rejected as too high an APA task force estimate (9) of outpatient visits to private practice psychiatrists (8,000 private psychiatrists each with 55 patient visits per week for 48 weeks yielded 21.12 million visits, of which Sharfstein and associates estimated 6.21 million were in private mental facilities, resulting in an estimate of 14.91 million outpatient visits). They chose instead to increase by 50% an NCHS estimate based on a household survey. The increase was to correct for "hesitancy about reporting psychiatric care in a household interview" and yielded an estimate of 6.56 million outpatient visits. Despite the 50% increase, this estimate is almost certainly too small by a factor of 2.5 or more. For example, a national survey of physicians conducted in the fall of 1970 by the American Medical Association indicated that 10,907 psychiatrists (not including 1,182 child psychiatrists) whose major professional activity was "office-based practice" conducted an average of 34.1 office visits per week and worked an average of 47.9 weeks, yielding 17.8 million office visits per year (10). Approximately 1.4% of these visits may have been to federally employed physicians, since 1.4% of all "office-based" physicians were in federal employ. If these visits are subtracted, the estimate of office visits is 17.55 million. If we consider all psychiatrists with patient care activities (N =20,570), the estimate of office visits would have to be raised, and Sharfstein and associates' esti-

mate would be too small by a factor of much more than 2.5.

Fortunately, data are now available from a one-year (May 1973–April 1974) NCHS survey of 1,700 office-based, patient care physicians, including psychiatrists (11). This survey estimated 20.3 million office visits to office-based psychiatrists, which has been discounted 5% per year back to May 1971 to correct for increases in the number of psychiatrists. This discounting yields 18.32 million visits, which accords very well with the AMA survey estimate noted above.

The estimate of the number of office visits to clinical psychologists in private practice is based on an American Psychological Association survey, which indicated that there were 1,688 psychologists in full-time private practice in 1971 (7). Psychologists in part-time private practice (N=3,579) are not included in this analysis. Assuming that the 1,688 psychologists had the same average number of office visits per week (34.1) and worked the same number of weeks (47.9) as the office-based psychiatrists in the AMA survey noted above, the number of office visits is 2.757 million.

It is a bit more difficult to estimate the proportion of office visits to nonpsychiatric physicians that represent care for mental disorders, since the estimate depends largely on how the term "mental disorders" is defined. Estimates in the literature range from 5% to 47.6% (12–14). Ten percent has been taken as a conservative estimate of the proportion of office visits to internists and general practitioners that represent care for mental disorders. Patients with medical or surgical problems and unrelated or secondary psychiatric disorders are not included in this estimate. I have used the estimates of the number of office visits to internists and general practitioners in the 1973–1974 NCHS survey of office-based physicians. Unfortunately, the survey report did not break out visits to internists and general practitioners by diagnosis. Mental disorders, however (diagnosed according to the eighth revision of the *International Classification of Diseases, Adapted for Use in the United States*), accounted for 4.5% of office visits to all physicians, including surgical specialists. However, surgical specialists would be expected to care for fewer patients with mental disorders than internists and general practitioners, and this may partially account for the lower NCHS figure. Office visits to internists and general practitioners have been discounted 5% per year back to 1971 to account for increases in the number of physicians and physician visits.

Expenditures

Except where noted, data on expenditures in 1971 by source and by recipient of funds have been derived from table 1 in *The Cost of Mental Illness—1971* (7) (see tables 2 and 3). It was necessary, however, as indicated in table 3, to separate some of the figures in this study into public and private expenditures with the help of data on patient days, facility or bed ownership, or patient diagnoses from NIMH and other sources. Only expenditures for direct care services and drugs have been included.

TABLE 2
Expenditures for Mental Health Care in 1971, by Source of Funds

Source	Total Expenditure* (thousands)	Percent of Total
Federal government		
Medicare and disability insurance	231,960	2.6
Medicaid	550,001	6.2
Other	964,687	11.0
Total	1,746,648	19.8
State and local government		
Medicaid	542,202	6.1
Other	2,618,333	29.7
Total	3,160,535	35.8
Private sources		
Fees	2,652,217	30.0
Insurance	1,058,380	12.0
Other	216,850	2.4
Total	3,927,447	44.4
Total	8,834,630	100.0

* Dollar figures are derived from *The Cost of Mental Illness—1971* (7, table 1).

DISCUSSION

The addition of mental health service providers and facilities that Sharfstein and associates did not include leads to conclusions about the relative roles of the public and private sectors that differ considerably from theirs. As table 1 indicates, 34% of inpatient days occurred in the private sector, rather than the 12% estimated by those authors. Another striking difference is the estimated proportion of outpatient visits that occurred in the private sector: 86% versus 53%. Clearly, a more complete enumeration of mental health service providers and facilities suggests a much larger role for the private sector.

As table 1 indicates, the vast majority of inpatient days in the private sector takes place in nursing and personal care homes. Almost 60% of the cost of this care is paid for by private dollars (7). Federally funded CMHCs may currently account for a somewhat greater proportion of inpatient days in both the private and public sectors, since 536 CMHCs were operational by mid-1975, compared with 295 in 1971. In the public sector, the vast majority of inpatient days takes place in state and county mental hospitals and public institutions for the mentally retarded. Almost 90% of the cost of care in state and county mental hospitals is paid for by public dollars (7).

The large number of inpatient days accounted for by nursing and personal care homes reflects in part a shift in the locus of care for mentally disordered elderly patients from state and county mental hospitals to these facilities. For example, between 1963 and 1969 the percentage of mentally disordered patients aged 65

TABLE 3
Expenditures for Mental Health Care in 1971, by Recipients of Funds

Recipient	Total Expenditure* (thousands)	Public Sector		Private Sector	
		Amount (thousands)	Percent	Amount (thousands)	Percent
State and county mental hospitals	2,695,964	2,695,964	100.0	—	—
Other public mental hospitals (includes St. Elizabeths, federal prison psychiatric hospitals, and Veterans Administration psychiatric hospitals)	412,646	412,646	100.0	—	—
Private mental hospitals	281,348	—	—	281,348	100.0
General hospitals (includes 10% of Veterans Administration inpatient expenditures)	927,746	305,228	32.9**	622,518	67.1
CMHCs	284,955	128,230	45.0	156,725	55.0
Freestanding outpatient clinics (includes campus and military clinics)	481,219	295,477	61.4	185,742	38.6
Nursing and personal care homes	1,443,553***	147,242	10.2	1,296,311	89.8
Halfway and rehabilitation facilities	194,916	186,196	95.5†	8,720	4.5
Special programs for children (includes school programs and residential treatment centers)	303,915	123,282	41.0	180,633	59.0
Private practice psychiatrists	833,117	—	—	833,117	100.0
Private practice psychologists	79,336	—	—	79,336	100.0
General medical practice (includes private and federal internists and general practitioners)	358,325	27,065	7.6	331,260	92.4
Psychotherapeutic drugs	537,590	—	—	537,590	100.0
Total	8,834,630	4,321,330	49.0	4,513,300	51.0

*Totals and subtotals are derived from *The Cost of Mental Illness—1971* (7, table 1).
**Based on annual patient days in non-Veterans Administration government general hospitals plus 10% of annual patient days in Veterans Administration hospitals (4).
*** 23.28% of all costs for nursing homes (7).
†This is an overestimate, since some rehabilitation funds are used to pay private practitioners and private facilities.

or more in long-term institutions who resided in nursing and personal care homes rose from 52.7% to 74.8% (15). Many of these people may not be receiving active treatment for their mental disorders, especially in personal care homes that do not have nursing services. It may be that those who are not receiving active treatment would not benefit from it and that these homes therefore represent a more economical and humane way of providing custodial care than state mental hospitals. It may be, but this remains to be demonstrated (16).

Outpatient visits in the public sector, as shown in table 1, are rather evenly distributed across several facilities. In the private sector, internists and general practitioners account for more visits than do psychiatrists. Even if the estimated proportion of visits to internists and general practitioners for treatment of mental disorders is decreased from 10% to 4.5% (the NCHS survey figure for all physicians), these physicians would account for almost as many outpatient visits (15.075 million) as do psychiatrists (18.320 million). It should not be assumed, however, that the units of mental health care given by nonpsychiatric physicians are the same as or as effective as units of mental health care given by psychiatrists. About 77% of the cost of mental health care rendered by general practitioners and internists is paid for by private dollars (7). For psychiatrists in private practice, this estimate is 98%, which is undoubtedly an over-estimate, since no allowance was made for Medicaid payments to private psychiatrists (7).

Some recent national health insurance proposals have severely limited outpatient psychiatric services provided by psychiatrists but not those provided by nonpsychiatric physicians (17). This limitation probably reflected concern about the cost of long-term psychoanalysis (especially for individuals who are functioning well socially), a treatment nonpsychiatric physicians do not administer. Hiatt has discussed the need to limit access to expensive medical/surgical treatments in order to preserve finite resources for other treatments (18). The same argument may apply to long-term psychoanalysis, but a blanket limitation on all forms of outpatient care given by psychiatrists is neither medically justifiable nor economically necessary (19).

Of the estimated $8.8 billion expended on mental health services in 1971, about 20% came from federal sources, about 36% from state and local government sources, and about 44% from private sources (see table 2). Private sources pay for a larger percentage of all medical/surgical services than of mental health services; in fiscal year 1971, private sources accounted for about 64% of expenditures for all medical/surgical services (20). Although the exact percentages vary with the particular costs included and excluded, the greater participation of public dollars in paying for mental health services may stem partly from the large

public expenditures in state and county mental hospitals. Since the enactment of Medicare and Medicaid, however, federal and state percentages of expenditures for medical/surgical services have been increasing (20).

As is shown in table 3, expenditures for mental health services are received almost equally by the public and private sectors. More than half of the dollars expended in the public sector are received by state and county mental hospitals. In the private sector the largest recipients are nursing and personal care homes, followed by private psychiatrists and general hospitals. Private psychiatrists account for more dollars but fewer visits than internists and general practitioners, primarily because the psychiatric fee was assumed to be $35 per visit, whereas the fees for general practitioner and internist visits were assumed to be the follow-up office visit fees in these specialties (about $6.30 and $9.30 respectively) (7, 10).

In summary, with regard to mental health services in 1971, the private sector accounted for 34% of inpatient days, 86% of outpatient visits, 44% of expenditures by source of funds, and 51% of expenditures by receipt of funds.

CONCLUSIONS

As Sharfstein and associates noted, the volume of services (however measured) delivered by the public and private sectors is not the most important issue. They believe "a balanced mix of the two is essential" (1, p. 47). The most serious issues are making mental health (and general health) care accessible to all citizens, controlling costs without unwisely circumscribing services, and improving insurance coverage for mental disorders. Answers to these questions have been explored recently (17, 19, 21). A few additional points should be made, however.

Hall has questioned the effectiveness of mental health services: "Another problem for insurers is the failure of mental health professionals to document the effectiveness of various kinds of treatment. . . . For most physical conditions, this problem has largely been overcome . . ." (17, p. 1,083). Hall seems unaware that the effectiveness of medical and surgical treatments is constantly being tested and debated in the medical literature (22). These tests and debates create medical progress. Yet treatments with as yet uncertain benefits, such as coronary artery bypass surgery (23), certain drug treatments of cancer (24), and care in coronary care units (18) are not denied insurance coverage. If insurance coverage for medical and surgical treatments were limited to treatments for which incontrovertible evidence of effectiveness existed, a great many treatments would not be covered. In any case, the effectiveness of many pharmacological treatments in psychiatry is not in question (25–28), and evidence for the effectiveness of psychotherapy is accumulating (29–31). Insurers and public policy makers, however, must be helped to understand that "effectiveness" does not mean "cure." Even today, physicians can hope only "to cure sometimes, to relieve often, to comfort always."

Hall also stated that "mental health professionals in general have failed to provide the degree of cooperation and unanimity that many other health professionals have developed with reference to diagnosis (17, p. 1,087). That physicians other than psychiatrists often disagree regarding diagnostic criteria and findings, or diagnoses in particular patients, is not widely known or acknowledged (32, 33).

Muller and Schoenberg (21) have analyzed the economic interests shaping the future provision of mental health services by the public and private sectors. Mental health professionals must familiarize themselves with these economic interests and with the principles of influencing public policy making processes (34) to prevent insurance benefit packages, both private and federal, from determining patterns and modes of mental health care that conform poorly to past actuarial experience (19) and to their professional judgments about the best ways to care for their patients.

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Utilization of Prepaid Services by Patients with Psychiatric Diagnoses

BY DONALD T. FULLERTON, M.D., FRANCIS N. LOHRENZ, M.D., AND GREGORY R. NYCA

The authors document and discuss the utilization of psychiatric services in a rural group practice before and after the institution of a prepaid health plan. They found that the utilization of psychiatric services increased dramatically during the first year of the plan's operation. The increase in outpatient utilization continued throughout the 3 years studied, but inpatient utilization decreased after the first year and later reached a level lower than that seen before the plan was instituted. One possible reason for the decline in inpatient utilization is that increased outpatient care prevents hospitalization.

THE INCREASED COVERAGE for psychiatric illness now provided by a variety of health insurance plans has caused considerable debate over the utilization of these services. Only incomplete data are available, and much of these are from experience in the pioneering prepaid groups of the 1960s. Goldensohn and associates (1) reported on a demonstration project conducted by the Health Insurance Plan of Greater New York from 1965 through 1968. They found that when mental health services were introduced into an existing prepaid medical practice the average annual consultation rate was 11 per 1,000 enrollees. They also reported a treatment rate of 7.5 per 1,000 enrollees. That is, 11 per 1,000 had a one-time consultation and 7.5 per 1,000 applied for treatment. This study reported inpatient experience for an 11-month period only. Dur-

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ing this period there were 19 hospitalizations and an average hospital stay of 18 days.

Glasser and Duggan (2) reported on the utilization of psychiatric services by the United Auto Workers union (UAW) under a prepaid plan in Michigan. During the first year of coverage for psychiatric illness the utilization rate was 6.6 persons per 1,000 eligible for outpatient service. The average number of visits was 8.5. In 1965 the UAW contract provided for inpatient coverage of up to 30 days. In 1967 the benefit was extended to 45 days. During 1965 4.1 per 1,000 eligible people were admitted to the hospital for psychiatric reasons. The median number of hospital days was 12.3. When the benefits were extended to 45 days the rate was 4.2 per 1,000 and the median length of hospital stay 12.6.

This report will document and discuss the utilization of psychiatric services at the Marshfield Clinic and St. Joseph's Hospital in Wisconsin for a 4-year period. Because of the unique service area it was possible to study the enrollees for 1 year before the comprehensive prepayment plan was begun. These same enrollees were followed for 3 years during their enrollment in the plan.

In a previous paper by Broida and associates (3) the impact of membership in the same prepaid plan was reported for all medical services. The present report is an expansion of one of the segments of that study.

METHOD

The Marshfield Clinic is a 128-physician multispecialty group practice, and St. Joseph's Hospital is a 450-bed general acute hospital with a 38-bed psychiatric unit. Marshfield provides the only psychiatric services for the area covered by the health plan. Psychiatric services are also available at the Marshfield Clinic on a fee-for-service basis and through a county-funded mental health clinic. These services are provided in both instances by the same staff, all of whom are employees of the Marshfield Clinic. This staff also provides all of the psychiatric services at St. Joseph's Hospital.

The Marshfield Clinic, St. Joseph's Hospital, and Wisconsin Blue Cross and Surgical Care Blue Shield of Milwaukee instituted a comprehensive prepaid health plan in March 1971 (the Greater Marshfield Community Health Plan). The plan provided two annual open enrollment periods of 30 days' duration. At this time anyone could join the program regardless of his health history. The provisions of the program included 10 outpatient visits (renewable after 90 days) to a psychiatrist, psychologist, or psychiatric social worker and 364 days of inpatient psychiatric care. However, the rules on the psychiatric ward at St. Joseph's Hospital limit the hospital stay to 90 days.

The study population consisted of everyone who joined the plan during the first 6 months of operation (N=8,377). The utilization of services by patients with psychiatric diagnoses was evaluated monthly during the preplan year and for 3 years after the plan was instituted. The utilization was reported in terms of services provided by the psychiatric department of the Marshfield Clinic as well as other clinical departments. The number of ambulatory encounters was recorded as well as the number of hospital days. Because the plan limited ambulatory services to 10 visits until July 1, 1974, utilization of psychiatric services on a fee-for-service basis and services throughout the mental health clinic were also reported.

The cases studied had a primary diagnosis of psychosis associated with organic brain syndromes, alcoholic conditions, drug abuse, nonpsychotic organic brain syndromes, functional psychoses, neuroses, personality disorders, psychophysiological disorders, situational disturbances, and behavior disorders of childhood, according to the *Hospital Adaptation of ICDA (H-ICDA)* (4) categories 296.0–316.9. Excluded were stammering, stuttering, and other speech disorders (316.0); specific learning disturbances (316.1); tics (316.2); cephalalgia (headaches) (316.8); and other special symptoms (316.9).

RESULTS

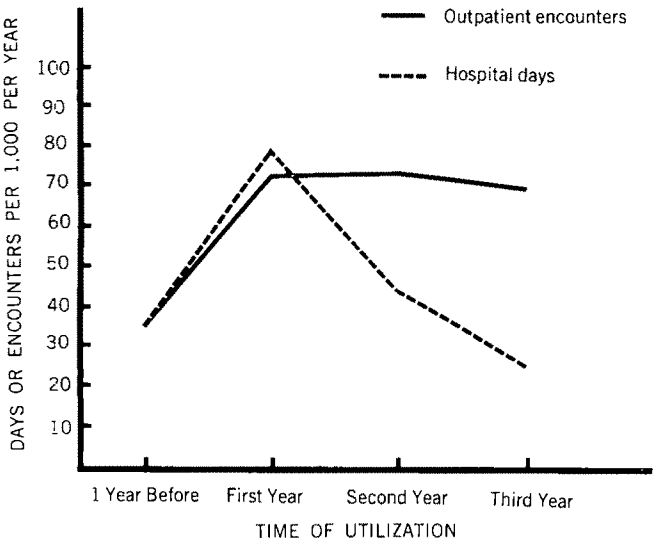
Approximately 3,000–3,500 of the study population were employees of St. Joseph's Hospital or the Marshfield Clinic and their families. The remainder of the enrollees came from other groups or joined during the open enrollment period. It was possible to obtain retrospective data on 7,799 person years for the year before enrollment in the plan. (A person year in our tabulations is a composite based on person months; a person month is 1 person eligible for benefits for 1 month.)

In the first year on prepayment 8,097 person years were reported. In the second year on prepayment it was possible to study 7,314 person years, and in the third year, 6,486 person years. The index year began in March 1971. The figures in the nonindex years are lower than those for the index year because some people did not live in the area for an entire year before the institution of the health plan and consequently could be studied for only part of a year. During the second and third year of operation of the plan a small number of enrollees dropped out of the plan or moved out of the area and consequently were studied for only the portion of the year that they were members of the plan.

The ambulatory encounter rate with the psychiatric department for the year before enrollment in the plan was 36.7 per 1,000 per year (286 encounters). During the first year on the plan the utilization rate rose to 71.9 (582 encounters). The second year it was 73.1 (535 encounters), and the third year it was 67.2 (436 encounters) (see figure 1).

The ambulatory encounter rate for psychiatric disorders with nonpsychiatrists in the Marshfield Clinic was 18.6 per 1,000 per year (145 encounters) the year before enrollment in the plan, 33.2 (269 encounters)

FIGURE 1
Utilization of Psychiatric Department's Services by Patients with Psychiatric Disorders Before and Under Prepayment Plan



the first year on the plan, 26.8 (196 encounters) the second year, and 35.8 (232 encounters) the third year on the plan.

Both psychiatrist and nonpsychiatrist providers had an ambulatory encounter rate of 55.3 per 1,000 per year (431 encounters) the year before enrollment. The first year on the plan there were 105.1 encounters per 1,000 per year (851 encounters) with all providers, the second year, 99.9 (731 encounters), and the third year, 103.0 (668 encounters).

The hospital utilization rate for the psychiatric department was 36.4 hospital days per 1,000 per year (284 hospital days) the year before enrollment in the health plan. This figure rose to 78.9 (639 days) the first year on the plan. The utilization rate fell to 45.5 (333 days) the second year and 24.7 (160 days) the third year (see figure 1).

The hospitalization rate for psychiatric diagnoses treated by nonpsychiatrists was 2.8 hospital days per 1,000 per year (22 days) the year before enrollment, 0.5 (4 days) the first year of enrollment, 4.4 (32 days) the second year, and 5.9 (38 days) the third year.

The hospital utilization rate for both psychiatrist and nonpsychiatrist providers was 39.2 hospital days per 1,000 per year (306 days) the year before enrollment, 79.4 (643 days) the first year, 49.9 (365 days) the second year, and 30.5 (198 days) the third year of enrollment in the plan.

The utilization data include visits made to the psychiatric department of the Marshfield Clinic after the plan limitations for ambulatory visits had been exceeded. These visits were paid for by the individual or by the Wood County Mental Health Service. During the first year of experience with the plan the study group made 215 visits outside the plan, the second year they made 107 visits outside the plan, and the third year they made 42 visits outside the plan.

COMMENTS

This study shows a dramatic increase in the utilization of services for treatment of psychiatric disorders after the institution of a prepaid program. Both outpatient and inpatient utilization doubled the first year of plan operation. The increased rate of outpatient utilization of services for psychiatric disorders continued throughout the 3 years studied. Inpatient utilization, however, fell after the first year and reached a level lower than the preplan level.

It is also of interest that during the first year of the plan's operation almost half of the visits made to the psychiatric department of the Marshfield Clinic were made outside the provisions of the prepaid plan. During the third year less than 10% of the outpatient visits to the psychiatric department were made outside the provisions of the plan. It is our belief that many of the enrollees in the plan were not aware of the limited psychiatric provisions of the plan during their first year because most visits outside the plan did not represent people who had exceeded 10 visits, the maximum number allowable. It is our impression that the 42 visits made to the psychiatric department during the third year of the plan represented visits made by patients who had exceeded the limit, which had been raised to 15.

This study demonstrates the impact of the institution of a comprehensive prepaid plan on both ambulatory and hospital utilization. There is a broad area for speculation on the reasons for these changes. The following hypotheses are offered as speculations on the reasons for the reported changes in the utilization of services. It is hoped that these speculations might be useful in examining the experiences of other groups.

The observation that the rate of hospitalization increased dramatically during the first year of the plan and then fell to below preplan levels may represent the effect of case finding. After prepaid services become available to a population there is an increase in first visits to psychiatrists; therefore, a number of problems that require hospitalization but that were not treated previously for economic reasons are uncovered. After this population has, in effect, been screened and people with preexisting psychiatric diagnoses have been hospitalized, the rate of hospitalization falls because a group of patients with serious problems has been treated.

We observed that the declining rate of psychiatric hospitalization in the second and third year of the plan coincided with a continued high utilization of outpatient services. It is quite possible that the declining rate of hospitalization was due to the fact that increased outpatient treatment prevented hospitalization. Of course, this is a popular idea in psychiatry; indeed, it was the feeling of the psychiatric department at the Marshfield Clinic that by making outpatient treatment more available we were preventing hospitalizations because patients were utilizing outpatient resources more.

The increase in the utilization of both inpatient and outpatient psychiatric treatment matches the experience of the Marshfield prepaid plan with other diagnoses. It has been the experience of the Marshfield plan that the utilization of both inpatient and outpatient medical services increases dramatically after the institution of the plan.

It should be noted that the Marshfield Community Health Plan is different from the prepaid plans reported previously (1, 2). One difference is that, unlike the Michigan United Auto Workers plan, which was limited to a group of workers in one industry, the Marshfield plan was open to anyone who wished to join, regardless of past health history. It is possible that this plan was self-selecting and that individuals who were aware of their poor health joined the plan with the intention of utilizing psychiatric services that they had postponed previously for economic reasons.

Our best guess is that the inpatient utilization rose during the first year of the plan and then fell because a number of cases of severe psychiatric illness were uncovered by the newly available psychiatric services and that after the plan had been in operation for some time outpatient psychiatric treatment was able to prevent hospitalizations.

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Milieu Therapy: Toward a Definition for Reimbursement

BY LOUIS E. KOPOLOW, M.D., AND GENE D. COHEN, M.D.

The authors identify certain essential elements and processes within the milieu therapy approach that could provide the basis for reimbursement of this treatment modality under insurance. They also examine a philosophical framework, various guidelines, and a mechanism for accountability in the use of this form of treatment.

DESPITE MILIEU THERAPY'S long history as an important element in psychiatric treatment (1) in day and night hospital programs and 24-hour inpatient settings, the provision of this service has been recently used as the basis for denial of insurance benefits, e.g., by the Federal Employees Health Benefits Program. Such denials have already produced several suits and will undoubtedly produce more unless an accepted standardized definition for reimbursement can be reached.

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PROBLEMS OF DEFINITION

Although most psychiatric facilities claim to have a therapeutic milieu, few are able to show a truly coordinated program worthy of reimbursable status by third-party payers. Part of the problem has been the very popularity of the concept of milieu treatment. The studies of social scientists such as Mead (2), Srole and associates (3), Rogler (4), and Hollingshead and Redlich (5) have emphasized the importance of social variables in the development of mental illness. Another popularizing trend in the development of milieu therapy has come from the hospital-cultural-social studies of Goffman (6), Stanton and Schwartz (7), and Maxwell Jones (8), who described therapeutic and nontherapeutic aspects of staff-patient relationships. With such influential scientists emphasizing the importance of milieu, it is not surprising that many hospitals are attempting to replicate successful models of milieu therapy in their programs.

Problems have arisen, however, because programs developed for specific facilities, i.e., small, private, heavily staffed institutions, are unable to be successfully superimposed on large state hospitals due to structural variables such as size, administrative and legal

control, and financing. Another problem of popularization of the concept has been that some mental health professionals have viewed milieu therapy as a smorgasbord from which they could select portions of their choosing and ignore aspects with which they did not agree.

To help resolve some of these problems about milieu, it would be useful at this juncture to proceed from a dictionary definition to a working and reimbursable definition of milieu therapy. *Webster's Third New International Dictionary* (9) defines "milieu" as "environment" or "setting." Thus milieu, in and of itself, is not therapy or necessarily therapeutic; rather, it is merely a setting or framework. Depending on how it is structured or designed it can become therapeutic, as in a therapeutic community of the psychiatric ward or day hospital.

What, then, is milieu therapy? Unlike traditional dyadic psychoanalysis, which focuses on internal dynamics, milieu therapy addresses the external factors that affect behavior and, ultimately, the adaptive capacities for those involved. To be effective, a milieu must be sufficiently flexible to meet changing environments and the constant readjustment of individual behavior to internal and external pressures. As Almond pointed out, "No one setting can handle all problems, no problem can respond to all milieus, and not all milieus can survive in the same societal framework" (10). It is no more reasonable to expect the adequacy of a single paramount approach in addressing external dynamics than it is to expect it for internal dynamics (witness the multiplicities and approaches in psychotherapy). Therefore, depending on the person and the problem, the dyadic as well as the milieu approach will vary.

A milieu therapy program provides and creates opportunities for corrective emotional experiences and graded experiences in learning coping techniques. Within a given milieu, individual components can be varied according to the individual problems or needs of the patient. These components, including group therapies and activities, occupational therapy, recreational therapy, supportive measures, and medical/psychiatric management, do not exist independently of each other, but rather interrelate to produce a product greater than the sum of its individual parts. Milieu therapy is the process by which the total setting in which the individual lives and functions, including the activities and interactions within it, is structured in accordance with treatment goals and changing internal and external dynamic factors, with the aim of achieving or supporting maximum improvements in the patient's condition. To the extent that the process is carried on, the milieu becomes actively therapeutic.

FUNCTIONS OF THE MILIEU THERAPY APPROACH

In the underlying program the therapeutic milieu has three important functions—rehabilitation, support, and medical/psychiatric management of the patient. Within the milieu these functions overlap. Rehabilitation seeks to return the individual to a level of functioning equal to or, ideally, better than that prior to the onset of his illness. Support is achieved through the stability, constancy, and reality testing that characterizes a therapeutic milieu, and it gives the patient the building blocks from which to restructure an ordered existence. A final function of the therapeutic milieu is in the area of medical/psychiatric management. The observation of a patient's behavior in various milieu programs, such as occupational therapy or group therapy, enables the mental health professional to make adjustments in the patient's treatment plan to facilitate consistent improvement (11). These adjustments might include an increase or decrease in psychiatric medications, addition of new programs, or abandonment of activities not found to be of value.

The therapeutic milieu focuses on the reduction of behavioral disturbance and the restructuring of ego functions. To the extent that treatment activities within a setting can be coordinated and beneficially structured to accomplish the previously cited programs and goals, one has a therapeutic milieu. Although milieu is important for every person, that is not to say that all psychiatric patients require milieu therapy. The indication for milieu therapy becomes obvious when one's external environment (i.e., home situation, family relationships, job, and peer group interaction) is in turmoil or the equilibrium between one's internal dynamics and one's perception of the external environment is disrupted. Thus the need for milieu therapy emerges with identifiable problems in one's milieu, and not necessarily with diagnosis.

Milieu therapy needs to be viewed along a continuum. Schematically, at one end of the continuum would be psychoanalysis, with its attention to internal dynamics and internal structural elements. At the other end of the continuum would be milieu therapy, with its focus on external dynamics, external structural elements, and internal perception of external environment. A candidate for psychoanalysis who had a sufficiently stable milieu would not require milieu therapy. However, a crisis or breakdown in this patient's milieu might lead to hospitalization, where the dyadic relationship would be continued but would be complemented by therapeutic milieu approaches. In this sense, milieu therapy might be necessary as either a primary or a complementary approach to treatment, not limited by narrow considerations of treatment of choice but rather seen as an essential part of the overall treatment program.

A BASIS FOR REIMBURSEMENT

Having addressed the more important theoretical considerations underlying milieu therapy, we will now examine the issue of the basis for the reimbursement of this treatment by third-party payers. In general,

milieu therapy contains two features not found in the absence of a milieu approach.

1. *A more comprehensive set of therapeutic interactions available to the patient*. It is true that many of these interactions (e.g., communications between patients and communications between a patient and a paraprofessional) take place whether or not a milieu approach is used, but unless they are actively reviewed in a structured clinical manner, they are much less likely to be therapeutic.

2. *A method of assuring that the various interactions experienced by a patient do not occur in isolation from one another*. This relates to the process of shaping a milieu and coordinating what occurs within it—a process, as alluded to previously, that is fundamental in facilitating the therapeutic effect of a milieu. Clearly, this is a true quality care orientation, but one that too often is not adopted because of the time (and therefore cost) involved.

The elaboration of these two features could provide a framework for a reimbursable definition of milieu therapy. It is apparent that in the milieu approach interactions are not only greater in number and scope, but also more interwoven. Furthermore, the process of coordinating these various interactions is crucial to the efficacy of the milieu approach. This process contains a diversity of potential activities, ranging from altering the overall treatment plan to examining the countertransference issues and conflicts that patients catalyze with the staff (e.g., the patient maneuver of playing off one staff member against another). This process, taking into account both the patient and his treatment community, aims at a better assessment of the patient's everyday life and perhaps a better sense of how he gets out of step with it.

It is also important to view the patient's interactions with attention to the physical setting in which they occur, for the setting itself can be facilitating or impeding. Considerations in this regard include attention to the ambience of the ward, distances between beds, the use and breakup of space, such as with social corners, the dayroom, whether doors are locked or open, and so forth. Again, this is an involved and time-consuming process, but it is this process that makes a milieu therapeutic and not just a setting.

Structure of the Milieu

As alluded to earlier, fundamental to what facilitates the therapeutic effect of a milieu is the process that shapes its structure or design. The elaboration of the treatment elements that comprise this process and should be common to all forms of milieu therapy can provide a generalizable basis for reimbursement. Such elements might include the following:

1. Identification of the problems that will be addressed by the milieu approach with each patient.

2. Development of an *individualized*, constantly adapted treatment plan that would include goals and delineate how the milieu is being used to alleviate the patient's presenting problems, as well as other problems subsequently identified.

3. Sufficiently frequent *team* meetings that a) delineate in the records the various interactions of the patient that are of therapeutic concern (e.g., patient-patient, patient-staff, family-staff, patient-treatment modality, and patient-physical environment interactions); b) delineate in the records the issues arising from each of these interactions and how they might be addressed; and c) focus on the coordination of the various interactions and staff input, with attention to their common and/or contrasting issues.

Perhaps the most difficult part of the milieu approach from the management perspective is the importance of coordinating staff input and the amount of time that this can require. In this respect, the experience of Artiss might be enlightening. In his book *Milieu Therapy in Schizophrenia* (12) he described a milieu approach that he adopted in treating schizophrenic soldiers on the ward of a military hospital. He emphasized that "operationally, I have found that I must spend 40 percent of my time with the staff." He then anticipated the next question—or expression of skepticism, if you will—and acknowledged that

> Such an elaborate system of conferences and discussions seems preposterous on the face of it, in a group whose sole responsibility is the treatment of a small handful of schizophrenic soldiers. It could be easily derogated as a "Parkinson's Law" sort of effect in which a small bureaucracy solidifies itself by finding new duties whose sole function is the continuation of the bureaucracy as such. Critics might also suggest that this 40 percent of the doctor's and staff's time might well be reduced to 10 percent and the remainder given to patients.
>
> Indeed, no one could be more empathetic with these critics than I. Superficially, it doesn't seem reasonable that a doctor should be required to spend so much time with a group of normals, just to help them keep functioning. However, each step in this direction has been necessary in order to keep the communication system sufficiently free from distortions that it could deal effectively with patients. (12, pp. 17, 18)

Two other points might also be made here. First, the community (i.e., the military) in which Artiss' ward operated was already highly structured, and still he had to invest 40% of his time in it. The second point, mentioned previously, is that what we really are concerned with is quality care. In this regard, is such an investment of time really preposterous? Certainly in Artiss' case it was not, since his ward was significantly therapeutic.

Accountability and Cost

To further strengthen the basis for reimbursing milieu therapy, accountability measures might also be considered. For example, during the process of hospital certification the surveyors should ascertain the following two points.

1. The facility has established predetermined points of concurrent review by a utilization review com-

mittee. This review need not include every patient but it could focus on a sample. Its value would be in demonstrating—if not assuring—the ongoing efficacy of the particular milieu approach.

2. The facility's milieu therapy program meets appropriate standards (such as the documentation of care noted previously). A facility's milieu therapy program should attain a reimbursable status if it has demonstrated that a working form of milieu therapy is in operation and that the necessary accountability measures have been implemented.

A final area for consideration in developing a reimbursable definition for milieu therapy is the determination of how charges for such treatment are to be made. One solution to this problem might be to include the milieu program under hospitals' or other facilities' (i.e., partial hospitals) daily "hotel and nursing charges." The cost of increased staff time involved in creating and maintaining a therapeutic milieu, such as the one described earlier in this paper, can easily be computed and added to existing daily charges. To handle problems such as reimbursement for nonstaff participation in milieu program planning (i.e., the patient's therapist), an agreed-upon consultation fee can be established. Whatever mechanism is finally established for the reimbursement of the cost of the therapeutic milieu, it is clear that this modality is essential to an effective treatment program and needs to be supported and promoted.

CONCLUSIONS

Milieu therapy is the treatment process by which the total setting (including the activities and interactions occurring within it) in which the individual lives and functions is structured in accordance with treatment goals and changing internal and external dynamic factors, with the aim of achieving or supporting maximum improvement in the patient's condition. The medical record should document the identification of problems requiring milieu treatment; the development of an individualized, constantly adapted treatment plan showing the methods to be used; and team meetings focusing on the patient's interactions with various components of his milieu. In order to achieve reimbursable status, the milieu therapy program must also show evidence of accountability, utilization review, and the meeting of appropriate standards.

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Psychotherapy Fees and Residency Training

BY STEFAN A. PASTERNACK, M.D., AND PHILIP TREIGER, M.D.

Many residents in psychiatry tend to ignore their patients' attitudes and behavior concerning payment of fees for psychotherapy. The authors report on a new fee policy program designed to earn additional revenue for a low-fee outpatient psychotherapy clinic; they stress the therapeutic importance of resident and patient attention to fee-related issues.

FUNDING CUTBACKS for psychiatry training programs have made it necessary for academic departments of psychiatry to generate new revenues in order to maintain existing educational programs. We studied potential revenue from a resident-staffed outpatient psychotherapy clinic and found that large sums of money can be earned by residents working in the traditional low-fee psychotherapy clinic associated with most training programs. How do residents learn about fee-related issues and how do they handle them in psychotherapy with patients? Relatively few contemporary writers have discussed this subject in basic psychiatric works, although there are some notable exceptions (1–6).

THE PROBLEM

When this study began, residents were asked to submit data regarding the fees charged to and collected from each patient with whom they worked in individual, group, or family psychotherapy. The outpatient psychotherapy clinics of the Department of Psychiatry, Georgetown University Medical Center, had a low-fee schedule based on various income and insurance characteristics. Fees were to be assigned to patients during the intake and evaluation period, and the residents were to supervise the patients' payment of fees to the clinic. Since little income was being generated despite a large volume of outpatient hours, it was clear that the residents' fee-setting practices were questionable. They tended to rationalize their extraordinary departures from usual practice with a variety of lengthy explanations. Many residents simply ignored the entire matter, never bothering to determine whether their patients paid their fees. As a result, the patients often made no payment in spite of repeated billings and notices from a collection agency. It was common practice for residents leaving the program to transfer cases with large outstanding bills. Even patients being charged $1 or $2 per session often owed hundreds of dollars. The residents had colluded with patients and then denied the impact of this collusion on their work. They kept no financial records of any transactions and were therefore able to claim ignorance. Some discarded the bills they were supposed to give to their patients. The residents overlooked flagrant fee violations by patients and accepted very improbable explanations for failure to pay. The residents tended to ignore the possible impact irregularities in fee behavior might have on the conduct of psychotherapy.

It was clear that the residents had deep doubts about the relative value of their therapy work. They felt guilty about charging for their services. Some thought it was too much to ask of the patients to attend the residents' clinic and pay for it. Many admitted to feeling anxious while discussing fee issues. They needed help in order to clearly see the underlying transference and countertransference issues involved. Too often and too easily they fell into neurotic conspiracies with their patients; treatment suffered, the clinic was deprived of important revenue, and the training function was also undermined. Some residents acted out against the department by abetting nonpayment of fees, by not assigning proper fees, or by attempting to offer special arrangements.

THE SOLUTIONS

Once these problems were clearly delineated, a number of clinic policies were established to resolve the financial and training issues involved. Each resident was assigned a minimum of 40 psychotherapy hours per month. The clinic fee scale was publicized, and the residents were required to promptly submit monthly billing sheets on which they listed each patient, the dates of sessions, and the hourly fee. After a clinic billing sheet with each resident listed was prepared, it was possible to see at a glance if the residents were doing their minimum work and charging appropriate fees. When a resident's output (number of reported therapy hours) declined, he was asked for an explanation. This procedure helped to identify residents who had diffi-

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culty keeping any patients in therapy and others who had specific problems with certain types of patients. Discussions about the residents' personal attitudes toward money (their financial goals, their own experience with money matters, and their expectations) were gradually expanded to include concern about cutbacks in funding and the threat to the integrity of the training program.

The residents eventually realized the importance of their work in providing revenue for the department. They became more aware of the potential value of their work and had an opportunity to explore fee issues that might have been overlooked until they began private practice. Discussions about third-party payers, the rising cost of mental health care, and the administrative organization of the clinic resulted in the hiring of an accountant to devise a simple bookkeeping system, adaptable to future private practice, for the residents to use. A double bookkeeping developed as a result of the requirement that each resident should know exactly what each patient was being billed and what he was paying. A secretary, who maintained a central set of books based upon figures taken from the monthly billing sheets, prepared each patient's bill and gave it to the resident. When the residents gave out their bills each month the transaction was personal, i.e., between doctor and patient rather than clinic and patient. The patients paid the residents directly with checks made out to the clinic. As a result of this procedure, the residents were always up to date on the patients' behavior and were able to immediately investigate late payments or other complications. Successive groups of residents rotating through the clinic became familiar with the new practices.

Of special importance was the heightened attention that all psychotherapy supervisors were asked to give to fee issues. It was important that such issues be thoroughly understood in the overall context of the patient's dynamic emotional conflicts. The residents were also required to submit to the clinic director quarterly reports on all cases, reviewing psychotherapy work and including comments about the fees being charged and collected. It was deemed just as important to avoid overzealous residents overcharging patients as it was to prevent inattentive residents ignoring fee issues. The new system ran smoothly for three years.

PATTERNS OF BEHAVIOR

A number of patterns of patient and resident behavior emerged as highly likely areas of fee "misconduct." One common patient pattern was the request for a lower fee, which was more often than not inappropriate than realistic and seemed to reflect a testing of the therapist's willingness to abet dependency. Some residents easily succumbed to the patient's wish to be treated with special indulgence and were likely to overlook the dependency issues implicit in such demands. Schizophrenic patients in particular seemed to be adversely affected when their therapists complied with requests for lower fees, and it was necessary for residents to be extremely alert to the complex fantasies that patients attached to any variation in the fee.

Dealing with insurance companies was a common problem. In general, patients tried to remove themselves from responsibility for their fees, leaving the doctor to negotiate with the insurance company. This tendency required careful clarification and often led to discovery of immaturity, reluctance to take responsibility in other areas of life, and unfulfilled dependency yearnings. Other patients tried to persuade the residents to misrepresent the initial date of treatment if they had obtained insurance coverage after that time. Some patients experienced conflict when their insurance companies sought information. One patient was indignant that the clinic would violate privacy and refused to explore the fact that he had made the claim to the insurance company and then did not want the doctor to give the required information. He secretly and then openly resented the need for a report, and therapy was almost sabotaged. It became clear that fee-related issues can easily interfere with the working alliance in therapy. Careful and frank discussions with patients in psychotherapy are necessary when dealing with issues of third-party payment. In some instances resistance to therapy may take the form of deviant fee behavior and all attention may be focused on the fee. However, such instances must be thoroughly explored for superficial and deeper meanings in order for therapy to progress. Failure to attend to fee-related issues on multiple levels may result in corruption of the therapy if not its complete destruction.

FINANCIAL OUTCOME OF THE PROGRAM

Over a three-year period the new fee policy resulted in a four-fold increase in clinic income. The residents took pride in their real contribution to the department and their training was substantially enhanced. Sensitivity to "money behavior" and fee training added a degree of sophistication to their interaction with patients. In the words of one resident, therapy work became more "real."

Numerous problems continued to arise—the most controversial was the question of charging for missed appointments. Clinic policy required the residents to explore with their supervisors any instance of missed appointments, late cancellations, and the appropriateness of charging in case of illness or family emergency. General guidelines encouraged holding the patient responsible for his appointments, but the residents were allowed to use their judgment. Some expected the patient to pay for every missed appointment regardless of the circumstances. Others struggled for what they considered to be fair solutions. The most critical point, however, was that this behavior would now be looked at closely.

It became easier for the residents to see how child-

hood patterns of behavior can be aroused during therapy and how at different phases of therapy a patient will miss many appointments, while at other times such resistances are not needed by the patient. The residents have been encouraged to set firm limits but also to be empathetic and understanding and to view the fee behavior as part and parcel of the overall therapy work. Focusing on fees helped bring to light the hidden meanings of missed appointments and made it necessary for the residents to explore them.

CONCLUSIONS

Training in psychotherapy involves knowledge about the setting and collecting of fees just as much as it does the establishment of other boundaries in therapy. Residents can and should be helped to deal more realistically with fee matters. In addition, attention to fees can enable residents to substantially increase revenues within the framework of a low-fee clinic. At a time when traditional sources of revenue are declining, it is important not to overlook any legitimate source of revenue.

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Free Psychotherapy: An Inquiry Into Resistance

BY JAMES L. NASH, M.D., AND JESSE O. CAVENAR, M.D.

Psychotherapy for which the patient is not charged, such as that provided by the Veterans Administration system, can lead to unique conflicts and resistances within treatment. Patients may depreciate the value of therapy, feel obligated to the therapist, or expect him to make inappropriate nonfinancial demands. The authors present five cases illustrating that lack of a fee may become the focus of insoluble resistances to therapy, and suggest that, particularly in training situations, a token fee should be charged to obviate these difficulties.

FEE ARRANGEMENTS are a major aspect of the psychotherapy contract, and continued exploration of the patient's feelings about the fee typically leads to the uncovering of deeper conflicts. We wish to describe some of the resistances encountered in offering insight-oriented psychotherapy in a payment-free setting.

The Mental Hygiene Clinic of the Durham Veterans Administration Hospital is staffed in part by second-year residents learning intensive psychotherapy under the supervision of the authors, both of whom are psychoanalysts. Since the veteran may not be charged for his care, and in many cases is "paid" to obtain it, (e.g., by having travel expenses reimbursed) the fee never becomes a focus of the patient's treatment.

Dewald (1) discussed the importance of setting an appropriate fee. If it is too low, the patient may depreciate the therapy or, alternatively, may feel obligated to the therapist, inhibiting the expression of any anger arising in the transference. Likewise, a therapist who feels guilty for accepting money for his services or who has an excessive need to be liked, admired, and seen as giving may set the fee too low to avoid negative transference feelings but adopt unconscious expectations of a "return of the favor." The patient may also question the therapist's motives in setting a low fee, assuming special interest or harboring the fantasy

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Opinions expressed herein are those of the authors and do not necessarily reflect the views of the Veterans Administration.

that the therapist will make some nonfinancial demand of him. Finally, a low fee may be a source of difficulty with patients for whom manipulation of objects has been an important part of their psychopathology. These patients may feel triumphant and thus influence the treatment from the outset in a variety of ways.

According to Gedo (2), retained money may represent a transitional object for the patient, in that nonpayment of the fee may serve as an unconscious attempt to deny the patient's separateness from the therapist.

There is disagreement over the need for the patient to sacrifice for therapy. Menninger (3) warned that the treatment "will not go well if the patient is paying considerably less than he can reasonably afford to pay. It should be a definite sacrifice for him, for *him* and not for someone else . . . innumerable complications arise if the patient pays for analysis with the largess of a relative, a friend, or a Foundation to which he has no effective responsibility for repayment of some sort." Allen (4), however, felt that third-party payment presents no problem and that the patient does *not* have to suffer hardship for effective psychotherapy to occur. He held that the patient need only be *responsible* for the fee, regardless of who is paying for it; this arrangement may be unsatisfactory, however, if a family member pays the bill.

Enforced absence of the fee compounds the difficulties. If the beginning resident or his supervisor is not alert to particular resistances that may be manifested, the treatment may founder. In fact, as the following case material demonstrates, some of these resistances cannot be handled effectively at all.

CASE REPORTS

Case 1 illustrates a situation in which free treatment generated overwhelming guilt in a patient with an obsessional character structure and many reaction formations against dependency.

Case 1. The patient was a 30-year-old man whose father was a successful and hard-driving merchant. He had been a popular and athletic child. After graduation from a leading university, he worked as a junior executive and was then drafted. While serving in Viet Nam he had several episodes of paresthesias and transient blindness, and was ultimately diagnosed as having multiple sclerosis. After discharge he joined his father in business. He viewed his employment there as his father actually "taking care" of him and supporting him, since he was unable to work much of the time because of his illness. He felt guilty over receiving money from his father, calling it a "handout." He complained that since learning of his diagnosis he had been lethargic and depressed, with no motivation. He was aware of a relationship between his emotions and his multiple sclerosis symptoms; when he became angry with his demanding father his paresthesias worsened.

The patient had seen a private psychiatrist for 10 hours but felt he couldn't afford to continue. He was uncertain, however, about paying nothing. He clearly viewed the lack of a fee as another handout. He was referred to a second-year resident for twice-weekly psychotherapy. At the end of the third hour he asked to pay something for his treatment. The resident attempted to explore the meaning of this request, but the patient was only able to express a vague but pervasive discomfort with the nonpaying arrangement. When it was explained that payment was impossible within the VA system, the patient requested referral to the psychiatric service of a local university. Interpretations were made suggesting that he viewed the therapy as another handout, and that his guilt prevented him from accepting the treatment. It was suggested that the guilt would be explored and understood in the course of treatment, but this was unsuccessful in dealing with the resistance and referral was made.

This patient had come for treatment with intense guilt feelings over accepting money from his father. The guilt was compounded by accepting the treatment for free. The absence of a solid therapeutic alliance precluded dealing with this overwhelming affect. A follow-up of his paid-for therapy revealed a lofty ego-ideal, intense shame, and guilt over his rage at his father for putting him in a subservient position.

Patient 2 illustrates the use of superficial guilt in the service of resistance against involvement in the treatment when the resistance is actually due to something else.

Case 2. The patient, a 24-year-old man, complained of anxiety and depression since serving in Viet Nam, where he felt "bothered" by the sexual promiscuity of many of his friends. He had had an acute anxiety attack when his wife met him at the airport on his return to the United States. Because of his chronic depression and dim view of life, his wife had left him 2 months prior to his seeking psychotherapy. The patient was the son of a rigid fundamentalist minister; his mother shared the father's rigidity. There was one younger brother, described as "single, drives a sports car, and chases all the girls." The patient had dated his wife-to-be from the age of 17 and married her several years later. He related no marital conflicts prior to his return from Viet Nam. The wife was described as a rather rigid "Christian" woman who was somewhat naïve.

The patient was felt to be neurotic, with an unconscious nuclear conflict of an adolescent type. He had a very rigid and archaic superego and had never really negotiated adolescence in terms of dating, sexual experimentation, and rebelling against his parents. A contract for twice-weekly insight psychotherapy was made.

One of his first resistances was expressed as a feeling that other patients were waiting to be seen, he knew the doctor was very busy, so why should the doctor take time to talk with him when he was paying nothing? The patient was feeling guilty about being seen for free. He also had a sexual identity conflict commonly seen in adolescents. He wanted to be independent, discount his parents' beliefs and mores, and have a peer group with which to identify. He appeared to fear becoming passive and dependent on the physician, yet actually desired this desperately. Even with the knowledge that these were the real conflicts, it was impossible to deal with the superficial resistance regarding the lack of a fee. The patient interrupted treatment prematurely.

Any premature interpretation of the above material would only have served to heighten the patient's resist-

ance and produce more anxiety. Paying a fee, regardless of its size, would have made his superficial resistance accessible and allowed exploration of deeper material.

The wish for oral gratification and affects resulting from frustration frequently underlie pathological character structure. To unwittingly gratify rather than analyze these needs is to shield from therapeutic inspection potentially crucial material. Patient 3 exemplifies this dynamic:

Case 3. This 28-year-old single man had been hospitalized for 40 days because of disabling phobic symptoms and severe anxiety. He was treated with psychotropic medication and psychotherapy, followed by 2 years of psychotherapy with a resident. The treatment was through the university service and he was charged a nominal fee.

The patient's major dynamic structure reflected concern with desertion at the age of 5 by his father, a career military officer. He was very angry at both parents, and felt they still "owed" him something. He used repression, denial, displacement, and isolation of affect as major defense mechanisms and defended against his anger in the transference by passivity, feeling that the therapist owed him something. This conflict soon manifested itself over the fee and its payment, and many treatment hours were devoted to this issue.

Therapy was interrupted when the resident finished the training program, and the patient applied to the VA clinic for further treatment. He stated that money and paying for his treatment had been a major issue in his previous psychotherapy, that the issue was not completely understood, and that he should continue to pay a fee. He thought he would feel guilty unless he were paying something for his treatment. He was referred to the university service and has continued in psychotherapy there.

That the patient was able to verbalize the conflict about money and his need to continue to work on this issue revealed that he had made considerable progress. More importantly, he had the ego strength to refuse the free treatment, even though he desperately wanted to be seen for free. If this patient had been seen initially for no fee, these issues would not have arisen as soon, and the bill and its meaning for him would have never become the focal point of treatment. In essence, his neurotic wish to receive what was "due him" would have been gratified and would not have become an intrapsychic conflict.

Patients with overt sexual identity problems have great difficulty with free psychotherapy. Patients 4 and 5 illustrate fantasies of nonfinancial demands being placed on them by the therapist in lieu of money.

Case 4. The patient, a 24-year-old man, complained of depression and had much chronic, free-floating anxiety as well as difficulties about sexual identity. While overseas in military service he had his first homosexual encounter, and upon returning to the United States had both heterosexual and homosexual experiences. His father was a sadistic alcoholic who had deserted the family when the patient was 4 years of age. The patient was the man of the house after his father's departure. As a teenager he worked to help support the family and he continued to feel an obligation to help support his mother and siblings.

Insight psychotherapy progressed well through some 35 hours. The first transference reactions were of a homosexual attachment to the therapist, defended against by promiscuous heterosexual acting out. When cautious interpretations of the acting out were made, the patient began to verbalize concerns about the therapist's investing time when there was no financial reward. The patient feared that the psychiatrist would make homosexual demands of him.

Although this fear was clearly a projection of the patient's unconscious wishes, it was difficult to deal with this material when the patient was paying no fee. One cannot readily tell a patient that he is an interesting case for training purposes and that he was one chosen from many who applied for treatment. If patient 4 had been paying an appropriate fee his resistance could have been dealt with easily. The same concern would have surfaced later, but hopefully at a time when more groundwork had been laid and at a more appropriate time for understanding and interpreting the difficulty.

Case 5. This patient was a 26-year-old single student who appeared at the university clinic asking for help with two problems. First, he was on academic probation because of low grades and severe difficulty in relating to teachers and peers. He had temper outbursts at instructors, called them "stupid," and insulted them. Secondly, he experienced severe anxiety around women, either fellow students or teachers. He would immediately make a sexual comment or pass at the woman; this behavior naturally led to difficulties in his peer relationships.

The patient's mother and father had had difficulty in their marriage for as long as he could remember. When he was 8 years old, they divorced, with the mother taking the patient and the father the older sister. He recalled that at the time of the divorce he felt he was "Mother's favorite." His mother remarried some 2 years after the divorce. At that time, the patient was seen by a psychiatrist, diagnosed as "hyperactive," and treated with methylphenidate, with a good response. The patient completed high school without difficulty, but when he later went into military service he began to experience severe anxiety when around women.

The patient was seen twice weekly on the university service. The fee was set at four dollars per hour, and he was seen for 6 months with very good progress. The main vehicle of the treatment was interpretation of dreams. The patient's object relations improved markedly and he began to make excellent grades.

At the end of 6 months the resident rotated to the outpatient clinic of the VA hospital. Since the patient was a veteran, there was no difficulty in the resident's continuing to see him at the VA, but the fee was necessarily dropped. Subsequently the patient did not report a dream for 2 months and began to question why the resident was so interested in continuing treatment when no fee was involved. He stated that somehow he had felt better, and seemed to work harder in therapy, when he was paying. After 2 months, he related a dream in which he was going to visit his father. The affect in the dream was one of disgust, and the patient had nausea and vomiting in the dream. He also began to experience nausea and vomiting prior to coming for his therapy hours. Unconscious homosexual concerns about the therapist's intentions had arisen in the treatment as a result of the fee's being stopped. This was a projection from the patient, but it arose

prematurely because of the lack of a fee. This resistance and concern could not be dealt with on a realistic level and led to the patient stopping the therapy prior to a satisfactory working through and termination.

DISCUSSION

Although Lorand (5), Lievano (6), and others reported success with nonpaying psychotherapy patients, the lack of a fee in psychotherapy typically leads to complications. We have both had experience in low-fee cases seen as a requirement of psychoanalytic training. In these cases, the absolute fee as such was not the major issue, as long as the patient was paying a fee that was both appropriate for his financial circumstances and resulted in some hardship.

When the patient is treated for no fee many artificial variables are introduced. The lack of a fee may mobilize shame or guilt, which may preclude the patient's becoming involved in therapy. Some patients may use the lack of a fee as a superficial resistance to avoid involvement; with others, the absence of a fee may unwittingly gratify passive receptive wishes so that a very important portion of the patient's psychopathology never causes conflicts. With still other patients, fantasies of sexual involvement with the therapist will become intense enough to preclude continuation of treatment.

It is suggested that for the purpose of teaching residents in psychiatry the techniques of insight psychotherapy, all patients should be charged a fee. Lack of such a fee introduces an artificial variable that complicates and clouds the issues in treatment. When the patient is charged, many issues will naturally arise in regard to the bill—but these issues can be dealt with—whereas the issue brought about by no fee cannot always be resolved.

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BRIEF COMMUNICATIONS

Albinism and Schizophreniform Psychosis: A Pedigree Study

BY MIRON BARON, M.D.

The author presents a pedigree study of albinism associated with schizophreniform psychosis and concludes that the evidence of an association between the two traits is strong; the evidence for genetic linkage is suggestive. The pineal hormone melatonin and the melanocyte-stimulating hormone inhibitory factor may be etiologic determinants of psychosis associated with albinism.

GENETIC LINKAGE studies have recently been of much interest in psychiatric research. Color blindness (1–3) and the Xg blood group (3–5) have been claimed to assort with bipolar affective disorder in a linked fashion. A possible involvement of chromosomal markers in the transmission of schizophrenic disorders has not to my knowledge been explored.

The present study was designed to test the hypothesis of a genetic link between oculocutaneous albinism and schizophreniform psychosis. I will also propose that a neurochemical defect in albinism may have played an etiologic role in the generation of psychoses in this pedigree. (This hypothesis would not necessarily require the existence of a specific gene for schizophrenia.)

DESCRIPTION OF THE PEDIGREE

The family I will describe is of Yemenite-Jewish descent. All available family members (see figure 1, subjects III-2 through III-11 and II-3) were personally interviewed and old medical records were reviewed. Diagnostic criteria for psychiatric disorders followed Feighner and associates (6) and Spitzer and associates (7). Albinism was detected by a general physical examination and/or information obtained from family members. The criteria for determining oculocutaneous albinism (8) included whiteness of skin and hair, reddish irides, and red pupils. Subjects III-2, III-5, and II-3 manifested photophobia, horizontal nystagmus, and myopia. Skin tyrosinase was not tested.

Psychiatric diagnoses for available subjects were determined by two independent raters. In order to minimize bias, psychopathology in deceased family members was assessed before their albinism status was established.

Personal interviews and record review permitted an adequate determination of clinical status in generation III and in subject II-3. Interviews conducted with all available subjects provided sufficient, although less comprehensive, data on probands' relatives who were dead at the time the study was done (generations I and II, excluding subject II-3). The sample included 22 subjects (figure 1.). All albino subjects assorted for schizophreniform psychosis (5 cases) and one nonalbino (subject III-1) manifested "core schizophrenia." Subjects II-3, II-6, II-9, III-2, and III-5 presented with clinical features compatible with a remitting schizo-affective disorder, depressed type (7), as evidenced by a temporal relationship of schizophrenic and affective components. The deteriorated illness course in subject III-1 was consistent with the diagnosis of chronic schizophrenia (7). It is worth noting that subject III-2 had been reared apart from age 3 by nonalbino, nonpsychotic parents before his illness onset, a finding that supports a genetic hypothesis.

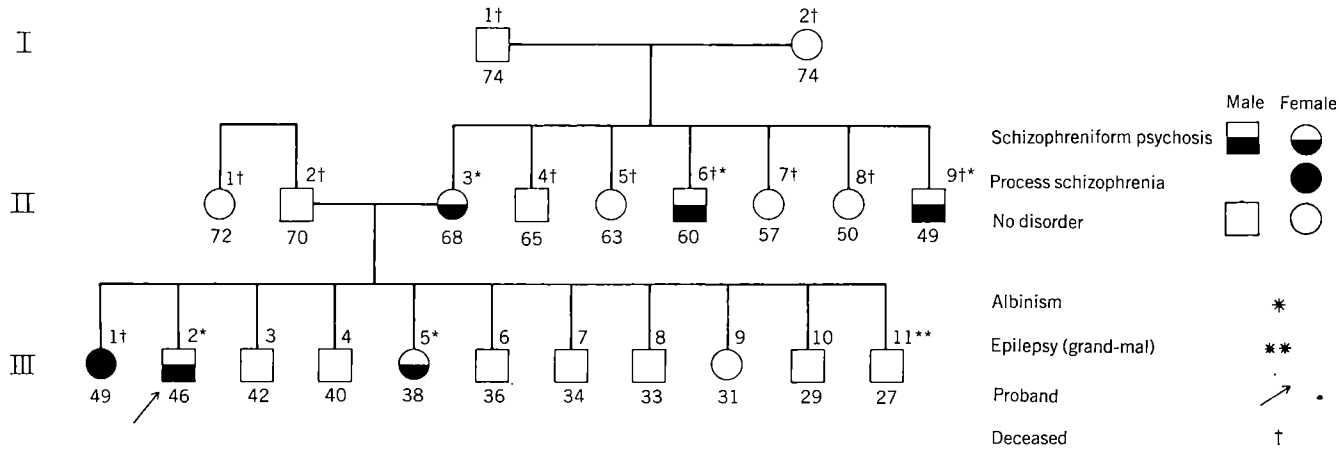
DISCUSSION

Albinism is a genetically determined hypomelanosis (8) with a reported incidence of 1 per 10,000–20,000 (9). Photophobia, nystagmus, and defective vi-

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FIGURE 1
Pedigree of a Family Assorted for Albinism and Schizophreniform Psychosis



sion may mark the clinical picture (8), and a frequent occurrence of hematological disorders has been reported (10, 11).

Genetic Hypothesis

Albinism is transmitted by an autosomal recessive gene. Thus, one can assume that subjects I-1 and I-2 (see figure 1) were both carriers. Because of the affected offspring in the third generation, one can assume that subject II-2 is heterozygous for this gene. Since the proportion of heterozygotes among nonalbinos is only approximately 1.4% (12), the possibility of a consanguineous mating must be raised. If one hypothesizes that psychosis is also being transmitted in an autosomal recessive fashion in the pedigree, one must assume that subject II-2 is also a carrier of a recessive gene for psychosis. Since the probability that a normal person is a carrier of recessive genes for both albinism and psychosis is even less than 1.4%, it seems even more likely that the mating is consanguineous. In fact, it might be argued that the probability of consanguinity in this pedigree is considerably higher than that in the general population because marital norms in isolated Yemenite-Jewish communities favor consanguineous mating. It is not essential, however, to know whether or not the mating is consanguineous in order to analyze the pedigree for an association between the two traits.

Guidelines for genetic linkage analysis have been presented elsewhere (12). The probability of linkage between genetic traits is a function of the distance between the two chromosomal loci carrying those traits. The closer the loci, the less likely it is that recombination (material exchange between paired chromosomes during the process of meiosis) will occur. Recombination between the two loci is denoted by the relative frequency of recombinants. Determination of the numbers of recombinants and nonrecombinants depends on the linkage phase in a doubly heterozygous parent in an informative mating. If one is testing the hypothesis that two recessive genes are linked (a gene for albinism and a gene for psychosis), a potentially informative mating is one in which one parent is doubly homozygous for the recessive genes and the other is doubly heterozygous. Subject II-3 is presumably doubly homozygous for recessive genes and subject II-2 is presumably doubly heterozygous. Since one does not know whether to hypothesize linkage in coupling or linkage in repulsion for subject II-2 (there was no information available on his parents to establish the nature of the assumed linkage), one cannot in fact determine which offspring are recombinants or nonrecombinants. (There are two possibilities: the schizophrenic albinos and normal offspring are recombinants and the schizophrenic nonalbinos are nonrecombinants and vice-versa.) Nonetheless, the ratio of nonrecombinants to recombinants or recombinants to nonrecombinants (the former, if one assumes linkage) is 10:1, which is suggestive of nonindependent assortment of genes. For linkage purposes, one has to assume that the genotype of subject II-2 is SsAa (s and a stand for recessive genes for schizophrenic psychosis and albinism, respectively) and that subject II-3 is ssaa. One must also assume that there is complete penetrance for ss genotype and that the Ss genotype is not affected.

The probability of obtaining a pedigree F1 if the hypothesis of linkage were true was compared with that of obtaining it under the hypothesis of no linkage, i.e., independent segregation. In the latter case, the recombination fraction Θ is ½. A maximum lod score Z, (the logarithm of odds favoring linkage over nonlinkage) was computed for $\Theta = .10$.

$$Z=\log\frac{P(F1|\Theta=.10)}{P(F1|\Theta=.50)}=1.55.$$

A Z score of 1.55 implies an odds ratio of 35.48:1 in favor of the hypothesis of linkage versus independence and may be considered suggestive of genetic linkage (12).

The offspring of subjects I-1 and I-2 should not be included in an analysis of nonrandom assortment of

genes, since it is impossible to determine which group of offspring constitutes a group of recombinants or nonrecombinants (noninformative mating). They can, however, be considered in an analysis of an association between the two traits, and the evidence is persuasive ($p < .001$, chi-square test, Yates' correction applied).

It can thus be concluded that the evidence for an association between genetically determined hypomelanosis (albinism) and schizophreniform psychosis in this pedigree is strong, but the evidence for linkage is merely suggestive. It could be argued, of course, that the albinos in this family might have been selectively mistreated and their subsequent development of psychoses was due to psychosocial rather than genetic causes. The development of psychosis in subject III-2, who was reared apart by nonalbino, nonpsychotic parents, presents crucial evidence against nongenetic transmission.

Neurochemical Proposition

Thus far, I have discussed my observation in terms of hypothesizing genetic linkage or a more general association of traits. I would now like to propose that a neurochemical defect associated with albinism might have played an etiologic role in the pathophysiology of schizophreniform psychoses. This hypothesis would not necessarily require a gene for psychosis and would not depend on genetic linkage.

Current biological models of schizophrenia postulate a γ-aminobutyric acid neuronal defect (13, 14) or dopaminergic hyperactivity in brain systems (15). The neurochemical hypothesis I propose requires two assumptions: that albinos are subject to enhanced retinal photosensitivity; and that excessive illumination mediated by optic neural pathways might result in decreased γ-aminobutyric acid neuronal tonus and/or increased dopamine activity in mesolimbic and nigrostriatal systems implicated in the neuropathology of schizophrenia (16, 17). The first assumption is supported by evidence that melanin impedes photoconductivity (18) and by clinical data on photophobia in albinism (8). Experimental evidence for the second assumption is based on data indicating modulation of neuroendocrine functions by lighting conditions. Excessive illumination curtails secretion of melatonin and melanocyte-stimulating hormone (MSH) (19, 20). Research data consistently indicate that melatonin inhibits production of prolactin release inhibiting factor (PIF) (21) and that exposure to light leads to decreased prolactin release (22). The suppression of melatonin activity by lighting conditions is considered to have eliminated the mechanism that opposes the action of the MSH-inhibitory factor (MIF) (20, 23). There is ample evidence to suggest that PIF and MIF release reflects dopaminergic activity in mesolimbic (24, 25) and nigrostriatal (26, 27) pathways, and that melatonin induces γ-aminobutyric synthesis (28, 29). It thus appears that melatonin deficiency and "high PIF-MIF" conditions might produce biologic vulnerability to psychosis by leading to 1) lower than normal tonus of brain γ-aminobutyric acid systems, and 2) increase in dopaminergic activity in neuronal systems implicated in psychosis. Such reciprocity has been related to the generation of schizophrenia-like conditions (14, 16). The evidence supporting the hypothesis is preliminary and inconclusive. Therefore, at this stage the proposition I have presented is merely a speculation.

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Anticholinergic Exacerbation of Phenothiazine-Induced Extrapyramidal Syndrome

BY MURRAY ALPERT, PH.D., FLORENCE DIAMOND, AND EDWARD M. LASKI, M.D., PH.D.

The authors used tremography to record the bilateral digital tremor of a patient showing extrapyramidal system effects in response to withdrawal from phenothiazines. They found that changes in the amplitude of tremor correlated with clinical ratings of extrapyramidal disturbance. Changes in the amplitude and in the spectrum of tremor were similar to the bipolar paradoxical changes seen during intoxication with an anticholinergic psychotogen.

PHARMACOTHERAPY OF SCHIZOPHRENIA involves a fairly high incidence of a number of patterns of extrapyramidal system side effects (1). The frequency and intensity of the early akathisic and dyskinetic syndromes may usually be reduced by the addition of anticholinergic medication or by a more gradual increase in the dose of antipsychotic medication. Later in the course of pharmacotherapy other related classes of the extrapyramidal syndrome (EPS) may occur. One is a possibly irreversible tardive dyskinesia involving stereotypy and characteristic involuntary motility of the oral region (2, 3). Several pathophysiological mechanisms have been proposed in the etiology of the EPS (4–6). Extensive exposure to high doses of neuroleptic drugs is thought to be a prerequisite for the development of this condition, although some cases following moderate exposure have been reported (7).

A second syndrome, involving akathisic and parkinsonian features and, perhaps, buccolingual involvement as well as gastric and autonomic signs, has been reported to occur with abrupt withdrawal of phenothiazines (8–10). Several investigators have implicated withdrawal from the adjunctive anticholinergic rather than the neuroleptic medication in the genesis of this condition (11). Their results suggest that discontinuation of combined phenothiazine and anticholinergic medication predisposed patients to withdrawal symptoms.

When a patient showing some of these withdrawal signs was admitted to the metabolic research unit at New York University-Bellevue Medical Center, we took the opportunity to track this patient's EPS during the course of the withdrawal process, using recordings of her digital tremor as well as clinical ratings of her EPS. Informed consent was obtained from the patient and her husband.

CASE REPORT

Case 1. M, a 39-year-old housewife who had been previously diagnosed as having manic-depressive psychosis, was admitted to the unit for special studies at Bellevue Psychiatric Hospital for observation and evaluation of her suitability for lithium treatment. Six months earlier she had been hospitalized because of changes in behavior characterized by excitability, hyperactivity, talkativeness, and manifest delusions and cognitive disturbances. She was treated with ECT and pharmacotherapy (150 mg of chlorpromazine twice a day in spansule form, 5 mg of trifluoperazine twice a day, and 2.5 mg of trihexyphenidyl twice a day). She had been taking this medication up to the day of her rehospitalization.

On admission she appeared ill, was markedly pale, physically weak, restless, apprehensive, and uncommunicative, showed no spontaneous speech, and revealed delusional thinking when questioned. There was a poverty of affect and evidence of extrapyramidal motor disturbance, including

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marked immobility and parkinsonian facies. A diagnosis of schizo-affective disorder with depression and drug-induced parkinsonism was made. All medication was stopped, and the patient was placed on placebo four times a day. A marked increase in the severity of the extrapyramidal disturbance, including cogwheel rigidity and tremor, was noted. Her gait became shuffling and unsteady, and her postural immobility and general flexion were more severe. For the next week the severity of extrapyramidal symptoms increased; they cleared during the following week.

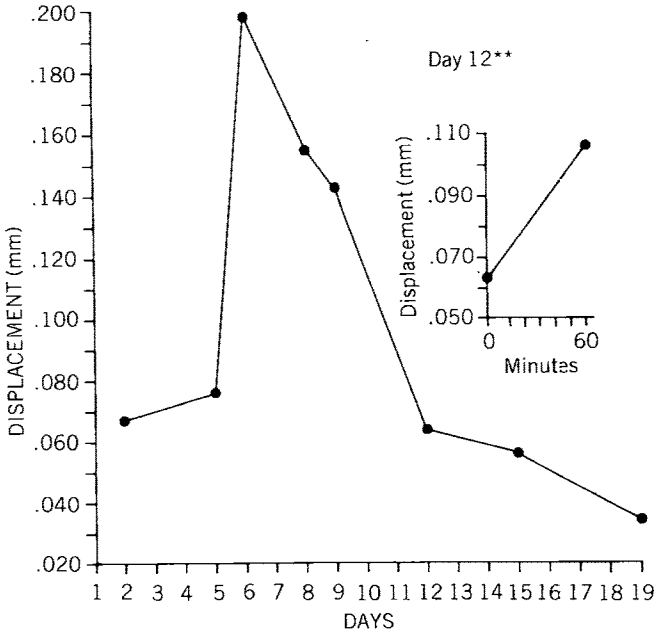
Using methods previously described (12) we recorded this patient's bilateral digital tremor serially during the withdrawal period and more frequently during drug trials. The tremographic system provides a quantitative measure of the amplitude and spectrum of the displacement of the index fingers of each hand. The patient was also rated for the presence and severity of the EPS on a clinical rating scale patterned after that of Simpson and associates (13).

Figure 1 shows the average level of tremor for both hands during the period when the patient was demonstrating withdrawal. It can be seen that tremor amplitude increased for about a week and then gradually returned to the normal range during the next week. The amplitude measure is not simply a correlate for the clinical impression of tremulousness. Increased severity of the EPS, including such symptoms as rigidity, expression, and posture, are also reflected in the tremography. The correlation between the tremor amplitude and clinical measurements of passive stretch, cogwheeling, and tremor is highly significant ($r=.88$, $df=6$; $p<.005$). Tremor displacement is less strongly related to the total EPS rating score ($r=.66$, $df=6$; $p<.05$).

Initially the patient was receiving placebo four times a day. As the severity of her EPS increased (day 5), antiparkinson medication was initiated in divided doses (see figure 1). On three occasions (days 4, 7, and 12) tremor was recorded following administration of trihexyphenidyl. During a typical experiment (presented in figure 1 for day 12), tremor increased slightly for 30–60 minutes following oral ingestion of the drug and then returned to baseline or lower during the next several hours. This paradoxical increase in tremor following an antihistamine or anticholinergic appears to reflect the basic alteration in extrapyramidal organization of the withdrawal condition; it is not characteristic of the response to anticholinergic medication of either normal subjects or patients with Parkinson's disease.

Amplitude of displacement in the 1–2, 2–4, and 4–8 Hz bands was elevated initially, increased further, and then declined. These are the bands most sensitive to dyskinetic and parkinsonian effects. With initiation of anticholinergic medication on day 5, the 8–12 Hz band showed a marked increase and then a decrease as the extrapyramidal irritability cleared. This band has been less frequently implicated in pathological tremor, although we have previously noted increased amplitude here in tremulous states associated with alcohol withdrawal psychoses and with toxic doses of a psychotomimetic anticholinergic (14).

FIGURE 1
Average Right- and Left-Hand Displacement After Withdrawal from Neuroleptic Medication



*On day 6, 50 mg of diphenhydramine was administered intramuscularly twice. On day 5, 4 mg of trihexyphenidyl was administered; day 6, 6 mg; day 7, 4 mg; day 8, 10 mg; day 9, 5 mg; day 10, 7 mg; day 11, 2 mg; day 12, 4 mg; day 13, 4 mg; and day 14, 2 mg.
**This graph shows the patient's reaction to 2 mg of trihexyphenidyl on day 12.

DISCUSSION

Although we must be cautious in generalizing conclusions drawn from an individual patient, study of this case can contribute to the clarification of some of the issues related to phenothiazine withdrawal. The evidence indicates that our patient developed a reaction related to withdrawal from combined phenothiazine and antiparkinson therapy. Reinstitution of antiparkinson therapy in the absence of phenothiazines produced a paradoxical exacerbation of the extrapyramidal signs. During the course of the withdrawal episode changes in the amplitude of tremor correlated with clinical ratings of extrapyramidal disturbance, but the changes in the spectrum of tremor were similar to the bipolar paradoxical changes seen during intoxication with an anticholinergic psychotogen (14). This finding is in contrast to the spectral changes usually seen in dyskinetic disease.

In view of the reports that the extrapyramidal effects of neuroleptic medication respond favorably to institution of anticholinergic medication (15), the question arises as to why our patient showed an unfavorable response to diphenhydramine and trihexyphenidyl. The positive studies had been with con-

tinued phenothiazine therapy; therefore, it may be that simultaneous treatment with both classes of compound is required. The interactions between the two classes of compound in producing and resolving extrapyramidal effects have not been studied extensively; it may be that the combination of drugs has actions that cannot be predicted from their individual actions (16).

Over the years a number of lines of evidence have been interpreted as suggesting that basal ganglia activity can be best understood in terms of a balance between cholinergic and adrenergic transmitter systems rather than the level of activity of each system (17). Our results are consistent with the observation of Simpson and associates (11) that the withdrawal of the anticholinergic provokes the extrapyramidal syndrome, but the effect does not seem to result from the persistence of the more slowly excreted phenothiazines. Explanation of the idiosyncratic response shown by our patient and, perhaps, by the case reported by Moline (7) might best be sought in some special vulnerability shown by these individuals to alterations produced in central neurotransmitter metabolism by these psychotropic drugs.

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Rapid Treatment of Acute Psychosis

BY WILLIAM H. ANDERSON, M.D., JOHN C. KUEHNLE, M.D., AND DONNA M. CATANZANO

Twenty-four patients with acute functional psychoses were treated with intramuscular haloperidol in a three-hour period. There was almost complete remission of cardinal symptoms (thought disorder, hallucinations, and delusional activity) in this period for 11 patients. Acute dystonia, easily reversed, was the only significant side effect. The authors therefore suggest that outpatient management may be feasible and preferable in the treatment of some acute psychotic episodes.

TREATMENT OF ACUTE psychotic episodes traditionally has included hospitalization and psychotherapy. In the past 20 years antipsychotic drugs have assumed a central role in the management of acute psychoses. That the so-called major tranquilizers have specific antipsychotic properties was recognized in the early 1960s by only a few authors (1, 2). Recent publications continue to emphasize the "tranquilizing" properties of these drugs rather than their ability to reverse more specific symptoms, such as thought disorders, hallucinations, and delusions (3, 4). Another recent report discussed the treatment of psychotic patients in a general medical setting, with an average length of stay of 9 days (5).

Although antipsychotic drugs are known to control violent and aggressive behavior, hypotensive side effects have discouraged their rapid administration (6, 7). Haloperidol, because it decreases α-adrenergic blockage, appears less likely to produce hypotensive effects than comparable doses of less potent drugs such as chlorpromazine (8, 9). Moderate doses of intramuscular haloperidol safely and effectively tranquilize acutely psychotic patients (10).

Hamill and Fontana (11) recently reported that chlorpromazine in doses up to 400–500 mg was ineffective in terms of both tranquilizing and antipsychotic activity in periods up to 5 days, a finding that contrasts sharply with earlier work (3, 8–10). Their research design used gradual increases of medication instead of the "digitalization" model described by Donlon and Tupin (10), in which high initial doses are quickly followed by low maintenance doses.

The question of dose-response and time-response curves for antipsychotic drugs is of current interest. Reversal of specific psychotic symptoms such as thought disorder in very short periods has not to our knowledge been reported yet. Such a finding would demonstrate the feasibility of ambulatory treatment or very short-term hospitalization for acute psychosis.

METHOD

The subjects were 24 patients who presented to the Acute Psychiatric Service of Massachusetts General Hospital with acute psychoses (onset less than 8 weeks) that met Research Diagnostic Criteria (12) for schizophrenia or mania. Patients with concomitant serious medical illness, epilepsy, or organic brain disease were excluded, as were women thought to be pregnant and patients in alcohol withdrawal. Patients who showed evidence of recent use of street drugs in history or physical examination were also excluded. Written informed consent was obtained from all patients prior to the research interviews and the administration of medication.

Patients were assigned randomly to two treatment groups. Both groups were initially given 5 mg of haloperidol intramuscularly. The high-dose group was then treated with 10 mg of haloperidol every 30 minutes until satisfactory remission of symptoms occurred or a maximum of 55 mg had been given. The moderate-dose group was treated with a dosage schedule of 5 mg of haloperidol hourly for up to 2 hours or until remission occurred.

All patients were evaluated hourly by a research analyst (D.M.C.) who was blind to the group assignment and treatment. Standard measurements were made using the Brief Psychiatric Rating Scale (BPRS). Interrater reliability between the research analyst and a senior clinician (J.C.K.) was established on another group of psychotic patients; coefficients were 0.72 for total BPRS and 0.86 for psychotic indicators.

The BPRS consists of 18 items reflecting mental status on a scale of 1 (not present) through 7 (extremely severe). Psychotic indicators within the scale consist of 6 items: conceptual disorganization, grandiosity, suspiciousness, hallucinatory behavior, unusual thought content, and elevated mood. Adverse reac-

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tions were monitored by a standard side-effects questionnaire (13).

After the initial 3-hour treatment period, patients were observed for 24 hours. Those judged to require further inpatient treatment were admitted to psychiatric facilities. Those whose clinical condition warranted outpatient treatment and who had adequate family and social support were followed in the outpatient service. Dosages and choice of medication were individually adjusted thereafter by clinicians assuming ongoing follow-up care.

RESULTS

The effect of the rapid intramuscular administration of haloperidol to these patients with acute psychoses is summarized in table 1. A patient was considered markedly improved if his BPRS score was 30 or less. This value was chosen as indicative of almost complete remission of symptoms and represents a mild level of disturbance typically encountered in outpatients.

Eight of the 19 patients who completed the protocol were given the diagnosis of acute schizophrenia and 11 were given the diagnosis of mania. There was no evidence of differential response to treatment on the basis of diagnosis.

No statistically significant differences in BPRS scores were noted between the high- and moderate-dose groups, who received average total doses of 33 mg and 13 mg, respectively, in the 3-hour period. The groups were then combined and the data were analyzed for dose response. The experimental design permitted patients to receive 5, 10, 15, 25, 35, 45, or 55 mg of haloperidol. Of the 11 patients who achieved satisfactory remission in 3 hours, 5 received 15 mg, 3 received 35 mg, and 1 each received 10, 25, and 45 mg. Thus there was wide individual variation in dosage requirements.

It is of greater interest that, in contrast to previous reports, substantial improvement was seen in short periods of time. In our sample of 24 acutely psychotic patients, 11 achieved marked improvement in 3 hours and another 5 within 72 hours. Moreover, this improvement consisted not only of the calming of anxiety or other nonspecific symptoms but also of amelioration of "core" psychotic indicators (hallucinations, unusual thought content, suspiciousness, elevated mood, conceptual disorganization, and grandiosity).

Adverse Reactions

Side effects were moderate or mild and in no case required termination of the protocol. There were no significant differences between high- and moderate-dose groups in incidence of side effects. The side effects that were evaluated are listed below.

1. Extrapyramidal reactions. Eight patients (4 in each group) experienced extrapyramidal symptoms, typically cervical and facial dystonia. All were treated with 2 mg of benztropine intramuscularly followed by oral benztropine as necessary.

2. Blurred vision. Four patients (2 in each group) complained of transient blurred vision. Two of them had received benztropine.

3. Dizziness. One patient (high-dose group) experienced transient dizziness without hypotension.

4. Possible hypotension. One patient (high-dose group) experienced transient faintness and pallor upon arising from a recumbent position. Blood pressure taken immediately thereafter in the recumbent position was 120/60.

5. Drowsiness. Six patients in the high-dose group (43%) and 2 in the moderate dose group (20%) experienced mild drowsiness at some point in the acute treatment phase. None of them was sedated to a point that would compromise the standard interviewing procedure.

TABLE 1
Response of Acutely Psychotic Patients to Intramuscularly Administered Haloperidol

Response Measure	Group: Moderate Dose (N=10)	Group: High Dose (N=14)	Total
Mean BPRS scores			
Pretreatment	66	57	—
After 3 hours	33	33	—
After 72 hours	28	27	—
Patient response (number)			
Marked improvement in 3 hours*	4	7	11
Marked improvement in 72 hours*	1	4	5
Improvement in 72 hours**	2	1	3
Unimproved	0	0	0
Dropouts***	3	2	5

* BPRS scores were 30 or less.
** BPRS scores were lower but still above 30; average reduction = 40.
*** Of the 5 dropouts, 3 withdrew informed consent for the research study but remained in treatment and did well, 1 eloped from treatment, and 1 could not be measured due to muteness, but did well in 1 week.

CASE REPORT

The following is an example of a case in which marked improvement was noted within 3 hours after administration of haloperidol was started.

A 38-year-old separated woman with a 2-week history of marked and rapid mood swings with anger, irritability, and elation came to the Acute Psychiatric Service in the company of her mother. She had not slept for 3 days. Two years previously she had had 3 hospitalizations, with the diagnosis of psychotic depression and, in the first hospitalization, sedative overdose. Mental status examination revealed that she was oriented but had inappropriate, elevated affect. Recent memory was intact. Stream of thought was markedly tangential. There was intermittent auditory hallucinatory activity and marked conceptual disorganization.

After she gave informed consent, the patient received 15

mg of haloperidol in a 2-hour period. Three hours after treatment began she showed some appropriate concern for her disturbance but her mental status was otherwise entirely clear. Her hallucinatory activity had disappeared, her stream of thought was no longer tangential, and her affect was not elevated or irritable. She experienced a dystonic reaction 7 hours after treatment began that was treated satisfactorily with benztropine.

On examination after 24 hours she maintained this remission in all details. She was placed on 25 mg of oral haloperidol daily and 1 mg of benztropine twice daily. She was followed by her local mental health clinic. Three months later her remission continued; the only medication she was receiving at that time was 50 mg of chlorpromazine at bedtime.

DISCUSSION

This preliminary study demonstrates the feasibility of bringing about rapid remission of acute psychosis: about half of our unselected cases were substantially relieved in a few hours. However, several important questions remain unanswered.

1. No drug-free control group was included. It is possible that some of the improvement resulted from nonpharmacologic factors. However, we think this is unlikely, since the value of chemotherapy in acute psychosis has been clearly demonstrated.

2. Even if we accept the feasibility of the rapid treatment approach, other clinical considerations need to be evaluated. It is possible that very rapid treatment may allow the patient or his family to deny the potential gravity of the illness and therefore become lax in continuing care. Clinicians should be especially aware of this potential pitfall in cases where a rapid and complete remission is induced.

3. When rapid remission occurs, prolonged hospitalization may be avoided and ongoing care may be given at a more convenient location. It is essential that the two care centers communicate the details of diagnosis, onset, and severity to ensure continuity of care.

4. The proper dosage and duration of medication following remission are still uncertain. There are undoubtedly many patients who may sustain a remission with little or no neuroleptic medication. How to identify such patients is an important research question.

These difficulties are present in the treatment of psychosis regardless of the method employed. Rapid remission is clearly no panacea, and, in fact, requires especially careful attention to details of diagnosis and continuing care. A safe means of rapid control of psychotic symptoms allows other therapeutic measures to be employed with maximum patient participation, economy, and avoidance of discomfort. Since it is clear that chemotherapy is not merely sedative but specifically antipsychotic, the patient deserves a chance for the rapid remission these drugs can effect.

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Attitude of Psychiatric Residents Toward Patient Requests

BY SHERMAN EISENTHAL, PH.D., ROBERT FERRELL, M.D., AND AARON LAZARE, M.D.

The authors assessed residents' comfort in dealing with 14 previously identified types of patient requests in inpatient, outpatient, and acute service settings. First-year residents expressed significantly more discomfort than more experienced residents on 11 categories. They were also significantly less comfortable in the acute service than the inpatient setting. All residents expressed more comfort dealing with dynamic, psychological, and "nonsevere" requests. These findings suggest a need to teach residents specific therapeutic responses to various categories of requests and to evaluate the desirability of starting the residency experience on an acute service.

PATIENTS VERBALIZE many different kinds of requests for help when they come to a walk-in clinic. Systematic study of these requests, based on a series of factor analytic studies of patient endorsement of request items, has confirmed the presence of 14 request categories that fit into 2 broad classes, psychological and nonpsychological (1, 2). Nine psychological request categories have been identified: clarification, ventilation, control, confession, psychological expertise, psychodynamic insight, advice, reality, and succorance. The 5 nonpsychological requests are triage, medical, administrative, social intervention, and "nothing."

It is our contention that an understanding of these requests has particular value in the conduct of the initial interview. We believe the clinician should learn to hear and explore the request and then negotiate it with the patient in order to gain a sound diagnostic impression and design an effective treatment program. The rationale for this "customer approach" has been described in detail elsewhere (2). A recent study (3) found that a patient's satisfaction is more highly correlated with his belief that the clinician helped him verbalize his request than it is with feeling understood, feeling better, or even getting the disposition he wanted.

The clinicians who operate the Acute Psychiatry Service at Massachusetts General Hospital (also called the Walk-In Clinic) vary in their comfort in dealing with patient requests. Most of the clinicians are first-year residents in psychiatry who rotate in six-month shifts. The acute service is the first training site of residency for half of the residents; the other half start in the inpatient ward. Throughout all three years of residency, residents work in the outpatient psychiatry clinic, where they learn psychodynamics and individual and group therapy.

The source and nature of residents' discomfort with patients' requests have implications for training and clinical service. Such discomfort, whatever its source, could have a negative influence on the quality of interaction and outcome. We tested the hypotheses that the degree of comfort in dealing with patient requests would increase with level of training, vary with treatment setting. and vary with the perceived treatability of the patient, as indicated by a greater comfort with 1) psychological versus nonpsychological requests, 2) requests not associated with severe psychopathology, and 3) requests associated with dynamic treatment expectations, i.e., clarification and psychodynamic insight as opposed to advice, succorance, medical requests, or social intervention.

METHOD

A questionnaire was sent to all first-, second- and third-year psychiatric residents at Massachusetts General Hospital. Ten of the 12 first-year residents and 17 of the 25 second- and third-year residents responded. The residents received an envelope in their department mailbox containing the questionnaire, a cover letter, and a set of instructions. The letter explained the purpose of the research, gave an overview of the instructions, and indicated how the questionnaire was to be returned to the investigators. The residents were informed that the questionnaire would be given a code number to insure their anonymity.

The written instructions in the envelope asked the residents to rate their comfort in dealing with 84 patient requests in three treatment settings on a 6-point scale (very comfortable to very uncomfortable). The settings were the Acute Psychiatry Service, the outpatient psychiatry clinic, and the inpatient ward.

The questionnaire was adapted from the Patient

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Request Form (PRF), originally designed for administration to patients (1, 4). Factor analyses of the PRF items have provided considerable support for the 14 request categories deduced from clinical analyses and observation (1, 4).

RESULTS

Experience

The first-year residents had lower mean comfort scores than the second- and third-year residents on each of the 14 request categories. The differences (analyzed by t tests) were statistically significant for 11 of the 14 request categories ($p < .05$). There was a trend ($p < .10$) in two categories, clarification and social intervention, and no significant difference in only one category, triage. The first hypothesis, greater comfort with increasing experience, was thus strongly supported.

Setting

Comfort ratings for first-year residents differed significantly (by analysis of variance) among the three treatment settings on 11 of the 14 request categories ($p < .01$ in 4 cases and $p < .05$ in 7 cases). The three categories with nonsignificant differences were psychological expertise, clarification, and "nothing." The second hypothesis, that comfort varies with treatment setting, was thus also strongly supported.

We compared the comfort ratings of first-year residents in the inpatient and the acute service settings. In 10 of the 14 request categories, the ratings were significantly higher in the inpatient than the acute setting ($p < .01$ in most cases). However, the residents were more comfortable in dealing with triage on the acute service ($p < .01$).

Type of Request

The first-year residents were significantly more comfortable with requests that were psychological than nonpsychological ($p < .001$), "nonsevere" than "severe" ($p < .05$), and "dynamic" than "nondynamic" ($p < .001$). The preference of first-year residents for the dynamic requests (clarification and insight) was striking. The second- and third-year residents also showed the same pattern of significant differences with regard to these 3 types of requests.[1]

DISCUSSION

Our clinical observation that psychiatric residents describe varying degrees of comfort in dealing with patient requests was substantiated. The experience of the clinician, the treatment setting, and the type of request were all significantly related to comfort with requests.

[1]A more detailed presentation of the results is available from the authors on request.

The hypothesis that experience would influence comfort ratings was strongly supported. One source of the discomfort of inexperienced residents appears to be insecurity regarding skill and clinical judgment. First-year residents were uniformly uncomfortable with all categories of requests except clarification and triage. Triage (requests for referrals in the community) can be easily learned and places no emotional burden on the clinician. Requests for clarification allow the resident to rely on problem-solving skills previously gained in normal social interaction. Triage and clarification requests do not place a strong demand on psychiatric conceptualizing or treatment skills. The absence of experience and skill is most telling in the areas where special expertise, authoritative judgment, or active intervention are required or requested: psychological expertise (authority), succorance (demand for personal involvement and warmth), advice (demand for decision making), and reality contact and control (coping with more severe disorders).

Another important influence on the clinician's comfort is the treatment setting. One of our major findings was that residents were least comfortable dealing with patient requests on the acute service and most comfortable in the inpatient setting, almost without regard to type of request. It would thus appear that the effect of inexperience can be accentuated or reduced by the treatment setting—an interaction that is particularly important from the perspective of a training program. This finding is consistent with reports on the training experience in a psychiatric emergency room setting, which is recognized as a source of multiple demands and stresses for the beginning resident (5, 6). Steele (5) observed that the resident is required to be adept in using a variety of treatment procedures and to act with relatively incomplete information in dealing with patients who are usually severely disturbed.

The inpatient setting is relatively more conducive to comfort because there is less pressure to make quick decisions, greater and more sustained supervisory support, and more opportunity to correct mistakes and misjudgments. This salutary effect of the inpatient setting varied with the kind of request, but was especially evident for requests associated with severity of disorder. It made much less of a difference for requests that were dynamic.

This research raises the important question of the appropriateness of placing first-year residents in the acute service. If comfort were the crucial criterion, residents should receive their first-year training on inpatient wards, as is done in many training centers. However, ideological issues are also involved. Assigning first-year residents to the acute service obliges them, at a critical early stage in their professional development, to view patients from a much broader perspective than they would ordinarily gain working exclusively in an outpatient or inpatient setting (7, 8). It exposes them to "general psychiatry"; psychotherapy or an inpatient experience may be seen as psychiatric subspecialties (7, 9). Residents who start their training

on an acute service will require, partly because of the discomfort they will feel, far more supervisory and didactic input than either of the two alternative settings. A department that elects a first-year experience on an acute service must be prepared to pay this price.

There are factors other than experience and setting that affect the comfort ratings of first-year residents. Some of these are related to issues of identity, values, and ideology. If the discomfort in dealing with nonpsychological requests (e.g., medical, social intervention, and administrative) resulted from a lack of previous experience with such requests in a medical setting, then there should also have been discomfort related to requests for psychodynamic insight. In fact, residents felt relatively comfortable dealing with insight requests, which suggests that value and identity factors as well as a skill differential are involved. Becoming a psychiatrist, for many residents, means learning to be an effective dynamic psychotherapist. Dealing with dynamic requests thus fits residents' image of "psychiatry," while dealing with nonpsychological requests does not. We conclude that first-year residents are more receptive and comfortable with dynamic requests as a result of the process of identity formation (10–12).

Administrative and social requests appear to place the greatest strain on the psychiatric resident's conception of how to play the physician role. Morrison and associates (13) argue that residents must abandon the authoritarian physician role and interact from a peer-mediator perspective. Past training has oriented the resident to view the patient from the perspective of individual psychopathology (10) rather than that of the social network in which the individual is embedded. This traditional orientation does not prepare the resident to deal with a social system over which he has less control than he has over the individual patient. The administrative and social intervention requests press the residents to be involved with the social system. The resident may be required to intervene on the patient's behalf as advocate or initiator when the patient's resources are deficient or are unavailable due to emotional crisis. Such acts as making a telephone call to a relative, speaking to another physician or care-giving agency, or writing on the patient's behalf to a draft board are often seen by the resident as demeaning and self-effacing, making the resident feel that he is a possible target for criticism because he has diluted and diminished his professional role (10, 11).

The greater discomfort with nonpsychological, "severe," and nondynamic requests can be further understood in the following ways. First, many of these requests place greater burdens of work and responsibility on the clinician, regardless of experience, setting, and ideology. If an intervention request is appropriate, the clinician may have to call in the family. If a control request is appropriate, the clinician may have to arrange for hospitalization or provide frequent visits over the next few days. On the other hand, triage, which had a very high comfort score, represents a quick disposition with no further responsibility. Second, there is no systematic body of knowledge about therapeutic responses to many of these requests, such as succorance, expertise, and advice. We believe that conceptualizing the patient as having one or more clearly defined and easily recognizable requests makes it possible to develop therapeutic strategies or responses for each request. This becomes an important task if we assume that general outpatient care goes beyond providing insight and clarification. Presumably, we could lower residents' levels of discomfort by teaching them therapeutic responses to specific types of requests.

CONCLUSIONS

We have established that residents experience varying degrees of comfort in dealing with patient requests and discussed the clinical antecedents that may give rise to this discomfort. The fundamental question that remains is the impact of such discomfort on the clinical process.

Our impression (which requires further study), based on observation of live and taped interviews and on preliminary studies, is that a resident's discomfort may lead to avoidance, disruption, and distortion in evaluation of the patient's complaints and in the negotiation of a treatment plan. Patient dissatisfaction and lack of compliance are likely outcomes.

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Treatment of Excessive Weight Gain in Patients Taking Lithium

BY G. MICHAEL DEMPSEY, M.D., DAVID L. DUNNER, M.D., RONALD R. FIEVE, M.D., TIBOR FARKAS, M.D., AND JULIA WONG

Six female primary affective disorder patients who had gained an average of 9.5 kg while taking lithium lost an average of 2.9 kg on a 10-day 900 calorie a day hospital diet containing 100 mEq of sodium per day. No evidence of lithium toxicity was observed on this regimen. There was no evidence that fluid retention played a major role in the weight gain.

SCHOU AND ASSOCIATES (1) reported weight gain of more than 5 kg in 11% of patients treated with lithium for a year or more and noted that weight reduction was difficult for these patients. According to our observations, approximately one-third of the patients attending the lithium clinic at the New York State Psychiatric Institute have experienced weight gain during chronic lithium prophylaxis. Several of these patients have complained of excessive weight gain ranging from 5 to 15 kg. In general, these patients have done well with lithium treatment, but they consider stopping the treatment in order to lose weight. They claim they have been unable to lose weight by dieting. On occasion, physicians have told these patients that amphetamines, diuretics, or thyroid medications might aid weight reduction.

Lithium discontinuance appears to be associated with a prompt return to the patient's prior frequency of affective episodes (2, 3). Thus these patients, mostly women, are faced with the choice of being overweight and affectively stabilized with lithium or losing weight and becoming depressed on manic again without lithium. The purpose of this paper is to report a safe and effective weight-loss regimen for patients who have gained weight during chronic lithium treatment.

METHOD

Six euthymic female patients with persistent complaints of excessive weight gain and inability to lose weight on self-regulated diets were admitted to the New York State Psychiatric Institute metabolic research ward and were placed on a calorie-restricted, sodium-, potassium-, and fluid-balanced diet. All patients volunteered for this 10-day study and gave informed consent for all research procedures. All of the patients had primary affective disorder (4); 5 were bipolar and 1 was unipolar. This ratio of bipolar to unipolar patients is representative of our general lithium clinic population. Furthermore, although there is no fee for clinic services, the majority of patients are of middle-class backgrounds similar to a private practice population (5).

The diet on the metabolic unit was specially prepared under the direction of the unit dietitian. Food intake was restricted to 900 calories, and the diet was designed to provide adequate amounts of all essential vitamins and minerals. The diets contained approximately 10 mEq of sodium a day, supplemented with 1-g capsules of sodium chloride given five times daily, and 60 mEq of potassium a day (no supplemental potassium was given). The patients were allowed ad lib fluid the first 2 days; the daily fluid intake thereafter was regulated to equal the established amount. Thus the diet contained normal amounts of electrolytes, fluids, and essential nutrients, but calories were restricted. During the study patients had no exercise other than that provided by the sedentary ward milieu.

Lithium medication was continued in the same doses as before admission. Fluid intake and output records were kept, and 24-hour urine collections were made. Urine electrolyte concentrations of sodium, potassium, and lithium were assayed daily and serum electrolytes were measured twice a week. When possible, a 5-hour glucose tolerance test was done, and 24-hour urine 17-OH and ketosteroid assays were obtained. All patients had thyroid function (T_3, T_4) tests, as well as routine medical laboratory tests on admission. No other medications were given during the hospitalization except in the case of 1 patient, who was continued on chronic estrogen therapy.

RESULTS

All patients lost weight during their 10-day hospitalization (see table 1). Weight loss ranged from 2 to 3.8

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TABLE 1
Weight Changes in Six Patients on Lithium Maintenance, in Kilograms

Patient	Age (Years)	Duration of Lithium Therapy (months)	Prelithium Weight	Maximum Weight Gain During Lithium Treatment	Weight Loss During Diet Protocol	Weight at Discharge	Weight at Follow-up	Length of Follow-up (months)
1	63	77	63.0	12.0	2.4	67.8	64.3	8.0
2	58	12	77.6	4.5	3.8	78.6	80.4	5.5
3	39	3	65.6	8.9	3.3	69.6	63.8	6.0
4	51	12	75.0	6.2	2.9	78.3	79.5	1.5
5	46	78	61.2	15.6	2.0	77.7	74.5	1.0
6	51	60	67.8	9.8	2.9	68.8	66.5	1.0

kg, with a mean of 3 kg. Serum lithium concentrations for the group ranged from 0.56 to 1.19 mEq/liter. None of the patients complained of nausea, diarrhea, trembling, or other lithium side effects during the study.

Laboratory data revealed that urine output was always several hundred milliliters less than intake, and no evidence of water diuresis was noted. Furthermore, none of the patients exhibited natriuresis or kaliuresis, and lithium excretion in the urine very closely approximated oral intake of lithium. No abnormalities were noted in the thyroid tests, glucose tolerance tests, or urinary steroid determinations. Follow-up was performed by means of clinic visits and telephone calls as of May 10, 1975. These follow-up data, presented in table 1, indicate that weight loss continued at home for some patients, particularly those who continued a calorie-restricted diet.

DISCUSSION

The mechanism underlying weight gain during lithium prophylaxis is not known. Demers and Heninger (6) reported pretibial edema in 9 consecutive patients with a history of manic-depressive illness who were started on lithium carbonate. The edema was restricted to the pretibial area and the associated weight gains were reported to be in the 2–3 pound (1–1½ kg) range. They found that the edema was associated with high sodium intake (173–246 mEq/day), was reversible with spironolactone (although urinary aldosterone was not elevated in these patients), and spontaneously remitted when lithium was discontinued.

Kerry and associates (7) reported weight gain in 8 long-term lithium responders (5 women and 3 men). All cases showed an initial, often large, weight gain after beginning lithium. The weight gain then ceased and the weight remained constant at the higher level. Mood stabilization was concurrent with the weight stabilization, and Kerry and associates interpreted the weight gain as due to "improved general health and continued good appetite and diet of these individuals who are no longer suffering from recurrent attacks of severely debilitating illness." They felt that the increased weight was fat and "solid" tissue representing a "normal" weight rather than water retention, and they questioned the desirability of these patients dieting. Plenge and associates (8) have suggested that the weight gain seen in patients taking lithium may be due to effects of lithium on intermediary metabolism. They showed that lithium caused an increase in brain and diaphragm glycogen and a fall in liver glycogen similar to the effects produced by insulin (9). They found evidence that these changes were mediated by lithium-induced increase in plasma glucagonlike activity and increased liver phosphorylase *a* activity (10). In manic-depressive patients, however, Mellerup and associates (11) did not find an increase in plasma glucagonlike activity in those taking lithium. They did find that manic-depressive patients taking lithium had fasting plasma insulin values twice those of non-lithium-treated manic-depressive patients. Healthy control subjects had fasting plasma insulin levels similar to the manic-depressive patients taking lithium. Other workers have found insulinlike properties of lithium. Bhattacharya (12) found that lithium caused a decrease in blood glucose in intact rats and rabbits and an increased uptake of glucose in isolated diaphragm and epididymal fat pads of rats. DeFeudis (13) found that lithium caused an increased uptake of glucose in intact mouse brain. Plenge and associates (8) postulated that the effects of lithium on sugar metabolism would result in increased fat tissue formation in patients taking lithium. They were able to induce weight gain in lithium-treated rats that was 70% higher than that in sodium-treated rats and offered this as evidence that lithium by itself, independent of manic-depressive illness, causes weight gain in human patients.

Other workers have shown effects of lithium on intermediary metabolism—lipids in particular. Leal (14) found that lithium inhibits the incorporation of acetate into phospholipids and triglycerides in rats. Krulik and associates (15) found that lithium was associated with an increased incorporation of glucose into triglycerides and phospholipids in blood, liver, and brain. In fatty tissue, glucose conversion to phospholipids is increased but triglyceride synthesis is decreased, and the authors concluded that, overall, lithium inhibits

the utilization of glycerides for the synthesis of fatty tissue.

The treatment of weight gain due to lithium has not been formally studied or reported before this study, to our knowledge. Furlong (16) reported a single case of a 51-year-old female patient who developed signs of lithium toxicity 2 weeks after beginning a self-prescribed 1,000 calorie diet that was inferred to be low in sodium. Furlong's patient had previously been stabilized on 300 mg of lithium three times daily, and she successfully abated her diet-induced side effects by reducing the lithium dose to 300 mg twice daily.

Our study, which was conducted under conditions of rigorous metabolic control, showed that patients who have gained weight in the course of lithium prophylaxis can lose weight by diet alone, without resorting to amphetamines, diuretics, or thyroid supplements. Furthermore, this weight loss occurred without a specific exercise program.

We did not note any side effects like those reported by Furlong (16), probably because sodium and fluid intake were regulated at normal levels. Fluid intake and output records, along with urinary electrolyte data, suggest that the weight loss represented tissue rather than extracellular fluid. Weight loss continued or was maintained for those patients who stayed on the diet during the follow-up period, although the rate of weight loss was considerably less than that during their hospitalization, when strict adherence to caloric intake was observed.

In reviewing the courses of these 6 patients in the lithium clinic, it became apparent that this weight gain tended to occur in 1- to 2-month spurts that were concurrent with the short-term use of tricyclic antidepressants for mild to moderate depression.

Often, patients' weight continued to increase greatly after the antidepressants were stopped—when weight did decrease, it never reached previous lower levels. Further research should be devoted to the mechanism of weight gain during lithium treatment. Areas of interest include the relationship between thyroid function and lithium during weight gain, the relationship between administration of tricyclic antidepressants and weight gain, and the effect of lithium on appetite.

It should be noted that although these patients lost weight, 4 of the 6 did not achieve their prelithium weight during the 4-month follow-up period of this study. This was probably due to lack of adherence to the strict low-calorie diet regimen. However, once these patients were made aware of the fact that they could lose weight by dieting, they ceased complaining about their weight gain. We believe this study has wide applicability for clinicians who encounter significant numbers of patients being treated with lithium who complain of weight gain as a side effect. We consider strict diet an effective and preferable alternative to the use of medications such as diuretics, thyroid supplements, or amphetamines for weight loss.

In conclusion, patients who gain weight during chronic lithium treatment should be encouraged to lose weight by means of proper diet. Because electrolyte balance is important in the avoidance of lithium side effects, the physician should emphasize that weight loss can and should occur with normal salt (sodium) intake.

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Treatment of Tricyclic Intoxication

BY RODRIGO A. MUNOZ, M.D.

The author outlines 11 supportive and symptom-specific measures for emergency treatment of intoxication with tricyclic antidepressants. He also describes 15 reported cases in which physostigmine was successfully used to treat tricyclic poisoning.

THE TREATMENT of tricyclic intoxication rightly falls in the realm of psychiatric studies because psychiatrists are prescribing the tricyclics in large amounts and for patients who are likely to use such drugs in suicide attempts. This paper discusses measures to be taken when tricyclic intoxication is suspected. They are addressed to the clinician who needs a plan of action that can be put into effect immediately.

EMERGENCY TREATMENT MEASURES

Treatment is both supportive of vital functions so that homeostasis is preserved and symptomatic for the specific effects of tricyclic antidepressants. Arena (1) proposed four cardinal principles of good management of poisoning: 1) identification of the drug or chemical as quickly as possible; 2) evacuation of the poison from the stomach, except when this is contraindicated; 3) administration of an antidote if one is available; and 4) symptomatic and supportive therapy as indicated. In an emergency situation the order of application of these principles may be altered depending on individual conditions. The following 11 steps are proposed for the psychiatrist seeing a patient in the emergency room when tricyclic intoxication is suspected.

1. Establish proper ventilation. Extension of the head and forward displacement of the mandible may help. If the patient is showing respiratory failure, the presence of an anesthesiologist for intubation and assisted respiration is recommended. Take vital signs and continue to record them according to the patient's condition. The patient's legs should be elevated to the level of the right auricle and the patient moved from side to side every 2 hours.

2. If the patient is alert, empty the stomach promptly by inducing emesis, followed by lavage if necessary. I usually administer 15 cc of syrup of ipecac, followed by large amounts of water. I start lavage in alert patients only if, in spite of the initial vomiting, the patient becomes progressively obtunded.

If the patient is confused or comatose I continue lavage for 24 hours or longer, depending on the apparent severity of intoxication. I use half-normal saline solution in repeated small amounts until the return solution is clear. Evidence that tricyclics are excreted in the stomach (2, 3) is the rationale for prolonged lavage.

3. Collect blood and the product of emesis for laboratory examination. This helps more in recognizing drugs than in evaluating the amount ingested, since blood levels of tricyclics are unreliable (4). If catheterization is indicated, urine obtained by this method should be sent to the laboratory for drug screening.

4. If the patient is no longer alert, is drifting into coma, or is already comatose, start 5% glucose in normal saline intravenously. Initially give 300 cc per hour; this may later be decreased to 200 cc per hour.

5. Obtain samples of all medications that the patient may have been taking at home, especially those likely to be used in a suicide attempt.

6. If the patient is comatose, install an indwelling Foley catheter.

7. If the patient has changes in consciousness or cardiac functioning, obtain an EKG. Barnes and associates (5) indicated that electrocardiographic tracings in patients poisoned with imipramine or amitriptyline show varying arrhythmias and/or widening of the QRS complex with S-T shifts. The widened QRS complex is often associated with a marked shift of the S-T segment, which gives the impression of extensive intraventricular block or ventricular tachycardia. Such EKG alterations should arouse suspicion of severe imipramine or amitriptyline poisoning. After the acute crisis is over, use of the stethoscope can replace EKG monitoring.

8. Minimize external stimulation to reduce the tendency for convulsions to occur. I presently use 10 mg of diazepam (Valium) intravenously for convulsions.

9. If hyperpyrexia becomes manifest, use ice packs and cooling sponge baths.

10. Shock, if present, should be treated by an internist, who can decide if intravenous fluids, oxygen, and corticosteroids are needed. If the use of digitalis is considered, the psychiatrist should alert the internist about the danger of increasing conduction abnormalities and causing greater irritation of the myocardium.

11. Use physostigmine for cardiovascular and central nervous system effects (6). Cardiovascular mani-

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festations include atrial tachycardia, nodal tachycardia, atrioventricular block, asystolic hypotension, intraventricular conduction delays, myocardial damage, and congestive heart failure. Central nervous system effects include agitation, hallucinations, extrapyramidal signs, seizures, and coma. Burks and associates (7) also mentioned choreoathetosis and myoclonus. These serious disorders have been attributed to the anticholinergic action of tricyclics. Several authors (8–12) consider physostigmine the logical antidote for tricyclic poisoning.

PHYSOSTIGMINE TREATMENT

I will discuss here 15 reported cases of successful physostigmine treatment for tricyclic ingestion. There is a growing literature showing that physostigmine is useful in the treatment of intoxication with any drugs producing a central anticholinergic effect.

As shown in table 1, serious effects have been detected with doses as small as 150 mg. Heiser and Wilbert (11) reported on a 53-year-old man who became disoriented and confused while taking 50 mg of amitriptyline three times a day and lithium carbonate. This patient improved after treatment with 2 mg of physostigmine given intramuscularly.

The most dramatic case, reported by Burks and associates (7), was that of a 2½-year-old, previously healthy child who took 400 mg of imipramine. He initially received 1.5 mg of physostigmine in 10 minutes, followed by 1 mg 30 minutes later, and then the same dosage 26 times in a period of 14 hours.

The largest overdose I am aware of was also reported by Burks and associates (7). Their patient took 10,000 mg of amitriptyline and responded well to 6 mg of physostigmine initially, followed by 2 mg 4 hours later.

My 27-year-old patient (14) took 9,850 mg of tricyclic antidepressants, which is the largest overdose I have successfully treated. She received 5–10 mg of physostigmine intravenously slowly every time she went into ventricular tachycardia. This patient was treated with 74 mg of physostigmine in the course of 6 hours.

The wide range of dosages reported so far by different clinicians indicates that each of them used physostigmine as a symptomatic treatment according to the patient's clinical condition, regardless of age (the second largest amount of physostigmine was given to a 2½-year-old child) or known amount of medication ingested. This point should be stressed because information given by the patient, examination of medication containers, reports by witnesses, and blood levels of the tricyclics are not fully reliable as guidelines for treatment.

Newton (4) warned about physostigmine-induced convulsions, which seem to occur after rapid intravenous administration. Rumack and Ott stated that they "have now had experience with well over 700 patients who have had anticholinergic findings treated with physostigmine. The results are truly dramatic. The side effects are minimal providing a rapid bolus of physostigmine is not given intravenously. Theoretically the drug is contraindicated in asthmatic patients, although we have used it in a few such instances with good results and without precipitating asthmatic attacks" (15).

TABLE 1
Characteristics of 15 Cases of Tricyclic Intoxication Treated with Physostigmine*

Study	Age of Patient	Amount of Tricyclics Taken	Physostigmine Dosage
Falletta and associates (9)	27 months	Not reported	1.0 mg/m²
Slovis and associates (6)	22 years	1,500 mg	3 mg
	16 years	1,500 mg	2 mg
	2.5 years	225 mg	1 mg
	29 years	900 mg	1 mg
Rumack (10)	14 years	Unknown	6 mg
Burks and associates (7)	2.5 years	400 mg	28.5 mg
	36 years	10,000 mg	8 mg
Heiser and Wilbert (11)	46 years	925 mg	2 mg
	53 years	150 mg	2 mg
Snyder and associates (12)	27 years	1,000 mg	8 mg
	32 years	1,000–1,500 m	16 mg
Granacher and Baldessarini (13)	32 years	625–750 mg	2 mg
	23 years	1,000 mg	2 mg
Munoz and Kuplic (14)	26 years	9,850 mg	74 mg

* Thirteen of the 15 patients experienced both central nervous system and cardiovascular symptoms; the second patient reported by Heiser and Wilbert (11) and the first patient described by Granacher and Baldessarini (13) had only central nervous system symptoms.

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The Manfred S. Guttmacher Award

The American Psychiatric Association invites applications for its annual Manfred S. Guttmacher Award for 1977. The award is given for any outstanding contribution to the literature of forensic psychiatry in the form of a book, monograph, paper, or other work, including audio/visual presentations submitted to or presented at any professional meeting or published during the year ending December 31, 1976. The award, which includes an honorarium of $250 and a plaque, will be presented at the Convocation of Fellows at the Annual Meeting in May 1977, in Toronto, Canada.

Anyone who wishes may apply to receive the award by submitting five copies of the work as well as five abstracts to Carl P. Malmquist, M.D., Chairman, Guttmacher Award Board, 1700 18th Street, N.W., Washington, D.C., 20009. Entries will be acknowledged but will not be returned.

The deadline for submissions is January 1, 1977, and any entry to be considered must be in Washington by that date.

LETTERS TO THE EDITOR

Product Goals for Residency Programs

SIR: "The Educational Objectives of the Psychiatric Residency Program" by Joel Yager, M.D., and Robert O. Pasnau, M.D. (February 1976 issue) is a useful but incomplete step in the evaluation of psychiatric residency programs. It emphasizes process and cognitive objectives. I know of no residency program that currently specifies product goals.

Possible product goals for residents might include the following:

1. Restore 3 acute schizophrenic patients to social productivity within 18 months, as measured by a minimum annual income of $6,000.
2. Restore a minimum of 4 involutional psychotic patients to tax-paying status (if under age 60) within 6 months.
3. Restore 2 chronic alcoholics under the age of 50 to tax-paying status for at least 6 months, with no more than 6 absences from work within that time.
4. Preserve, through family and marital counseling, 2 marriages in imminent danger of divorce (where young children are involved).
5. Change 1 heroin addict to tax-paying status for a minimum of 6 months.
6. Change 1 student from dropout status to good academic performance (B average or better) for a minimum of 6 months.

It seems to be that emphasis on such clearly defined product goals would carry with it the need for acquisition of the cognitive and process skills Drs. Yager and Pasnau outlined. However, it is unlikely that many will accept the concept of product goals until residents and their supervisors are paid for their products rather than for process.

PAUL H. BLACHLY, M.D.
Portland, Ore.

Drs. Yager and Pasnau Reply

SIR: Dr. Blachly's point that product goals are ultimately more desirable than process goals in medical practice is well-taken. Thus far, the medical profession has made few attempts to define product goals for training.

Surgical specialties often require applicants for board certification to provide their operating records for review (although, to our knowledge, long-term follow-up is not part of that review). However, aside from current attention to medical audit and peer review, we are unaware of any medical specialties that link product outcome to certification. This may reflect an awareness of the limits of what the various branches of medicine, including psychiatry, can actually deliver. If oncology or neurology, to name but two other specialties, were to be financed on a product basis, the "product" would have to be defined in a very modest way or there would have to be a basic reassessment of societal values with respect to the economics of health care, so that the costs of the failures would be absorbed and borne by the few successes.

To link medical payments to successful outcome may imply that we are capable of a zero-error system of medical care, which is a desirable goal but is currently far beyond our means. Since we do not even know all of the variables in the pathogenesis and outcome of psychiatric problems—let alone how to control them—we are not yet in a position to provide guaranteed work, except in extremely limited ways.

Our own educational objectives for skills and cognitive mastery are the means that hopefully contribute to achieving the ends that Dr. Blachly seeks. Unfortunately, the state of our art is such that the relationship between the ends (how our patients do) and the means (the skills brought to bear by residents and their health care support systems) is too often obscure. We lack sufficient outcome studies to tell us what we can expect from good care as opposed to bad care or no care.

We can safely assume that several of the goals Dr. Blachly listed can be greatly influenced by many factors beyond a resident's control (e.g., patient motivation, quality of available ancillary services, and family, social, and economic situations). Thus, successful achievement of product goals does not necessarily ensure that a resident has mastered the skills and cognitive material. Product goals are not sufficient by themselves—some patients would improve (or worsen) regardless of the residents' abilities.

One caution in developing product goals is that they are frequently value laden, as are several of Dr. Blachley's. As Arnhoff (1) has noted, the rapid adoption of certain desired goals without adequate data about the ultimate effects of pursuing such goals may prove counterproductive in the long run. An example might be the rapid discharge of psychotic patients to families and communities that are ill equipped to receive them, which is a type of product goal.

Efforts have been made to avoid the difficulties presented by value-laden product goals, which cannot be generalized across different patient populations and treatment settings. One such attempt involved use of the goals-attainment method to establish expectations for a possible range of outcomes early in the course of the treatment of each individual case. Individually relevant outcome measures may thus be developed, and trainees can then be evaluated according to the outcome (2). It hardly needs to be said that goals should be mutually agreed upon by patient and therapist. Of course, here too the effect of outside influences on outcome cannot be controlled. However, in spite of methodological problems, such efforts may be useful in the development of practical, individualized product goals.

The question of what psychiatry can deliver is of paramount importance and needs to be researched. Where we can identify exactly how patients benefit from professional intervention and honestly link that improvement to the specifics of professional involvement, we can develop product goals for our trainees. While at present there are few areas in psychiatry that permit such statements to be made with con-

fidence, there are some to be noted. Hopefully the future will provide us with many more.

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JOEL YAGER, M.D.
ROBERT O. PASNAU, M.D.
Los Angeles, Calif.

A Query on Follow-Up Results

SIR: J. Sanbourne Bockoven, M.D., and Harry C. Solomon, M.D., presented an interesting study of the outcome of treatment of patients in the Boston Psychopathic Hospital in 1947 and the Harry C. Solomon Mental Health Center in 1967 in "Comparison of Two Five-Year Follow-Up Studies: 1947 to 1952 and 1967 to 1972" (August 1975 issue).

The authors were surprised to find that 45% of the Boston Psychopathic patients compared to 31% of the Solomon Center patients had not been readmitted after 5 years, in spite of the fact that maintenance psychiatric drug treatment was used in the second study period but not in the first. This difference is highly significant according to my calculations ($p<.001$, chi-square test).

They attributed the difference to the aftercare program of Boston Psychopathic, but elsewhere in the article they stated that "no organized day program was available to patients discharged from Boston Psychopathic Hospital during the follow-up period. At Solomon Center, on the other hand, two types of day programs were available to discharged patients." Since the Solomon Center had a more elaborate and modern follow-up service, the results should have been better, not worse.

The authors stated that the two cohorts were about equal in severity of illness and resistance to treatment, although this is not supported by statistical data. There could be another explanation for this unexpected difference in follow-up results. It is probable that the methods of inpatient treatment in the two periods were different. Many patients in 1947 may have been treated with insulin coma or electroconvulsive therapy, whereas it is probable that insulin coma was not used in 1967 and ECT was used sparingly. It would be interesting to know whether these differences in inpatient treatment modalities were in fact present.

ROBERT B. DAVIS, D.P.M., F.R.C.P.
Bihar, India

Dr. Bockoven Replies

SIR: Dr. Davis has quite correctly surmised that the sample treated in the Boston Psychopathic Hospital in 1947 did include a rather large number of patients treated with ECT, insulin coma, or both. No patients were treated at the Solomon Center in 1967 with insulin coma, and only a handful were treated with ECT.

I should add that the Boston Psychopathic Hospital had no day program in 1947 or during the 5-year follow-up period, but it did provide extensive aftercare in the form of social casework by both social workers and student social workers, of whom there were considerable numbers.

We are most grateful to Dr. Davis for raising these points.

J. SANBOURNE BOCKOVEN, M.D.
Lowell, Mass.

More on Neuromuscular Side Effects of Antipsychotics

SIR: In his letter "Neuromuscular Side Effects of Antipsychotic Drugs" (January 1976 issue), Howard R. Barton, M.D., suggested that when a patient shows dyskinesia for months following cessation of neuroleptic therapy, "The proper approach would be to reduce the effective level of dopamine in pallidostriatal tissue. Amantadine has this effect on animal brain and should be more extensively studied as a possible approach to treatment of tardive dyskinesia . . ." In fact, amantadine has the opposite effect (1–3) and has been helpful in Parkinson's syndrome, where the lesion seems to be one of diminished dopamine availability (4, 5). Dr. Barton further states that the presence of tardive dyskinesia suggests cellular damage to the brain, which has not to my knowledge been conclusively proven (6).

While tardive dyskinesia remains one of the more perplexing and distressing problems of clinical psychopharmacology, answers and solutions are most likely to come from clear facts and documented data.

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ALAN J. GELENBERG, M.D.
Boston, Mass.

Dr. Barton Replies

SIR: Dr. Gelenberg is quite correct in pointing out that amantadine is recognized as beneficial in Parkinson's syndrome, where the lesion seems to be one of diminished dopamine availability. Amantadine has been shown to cause an increase in dopamine release in the animal brain (1). This effect would probably increase the signs of tardive dyskinesia at first.

However, patients with Parkinsons's disease not uncommonly experience a fall-off of amantadine effectiveness after a few months (1). This indicates that increased turnover of dopamine has ultimately resulted in greater excretion of metabolic end products of dopamine. Hence, the functional

and storage pool of dopamine has now been effectively reduced in pallidostriatal tissue.

Under these circumstances, therapeutic effects would then reverse so that tardive dyskinesia would be ameliorated, but there would be no further benefit in terms of parkinsonian signs, which would have been replaced clinically by the dyskinesia as a natural process. This paradoxical effect, if confirmed in controlled double-blind clinical trials, would point further to the opposite neurophysiological natures of these two conditions.

Dr. Gelenberg further states that there is as yet no conclusive proof of cellular damage in tardive dyskinesia. Hollister (2) postulated that morphological damage to presynaptic membranes may occur, resulting in dopamine "leakage," which would create denervation supersensitivity to dopamine. At this point, dyskinesia may become severe and irreversible. (I had referred to this finding in my previous letter but the reference was unfortunately deleted.)

The presence or absence of specific brain cell damage in tardive dyskinesia needs to be determined. Neurohistopathologic studies of autopsy specimens of pallidostriatal tissue are suggested. Evidence should be sought for damage of the cell membrane of presynaptic axon terminals and postsynaptic nerve cell bodies.

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HOWARD R. BARTON, M.D.
Los Angeles, Calif.

Prolactin Secretion and Antipsychotic Efficacy

SIR: We are indebted to John M. Davis, M.D., for his timely overviews on maintenance therapy (December 1975 and January 1976 issues). Dr. Davis has again brought us up to date with "Recent Developments in the Drug Treatment of Schizophrenia" (February 1976 issue). In that paper, Dr. Davis reviewed clinical and animal experimental data on the recently introduced antipsychotic drugs molindone and loxapine, supporting the clinical efficacy of these agents as well as their properties for blocking dopamine activity, which are probably critical to their therapeutic efficacy.

We would suggest that neuroleptic-induced prolactin secretion in man be included in the evaluation of antidopaminergic properties of potentially efficacious antipsychotic drugs. This neuroendocrine test bridges the gap between animal data (such as neuroleptic blocking of amphetamine-induced sterotypy or apomorphine-induced emesis) and the much more crude and probably unreliable observation of extrapyramidal side effects in man. Since it appears that all currently available classes of antipsychotic drugs stimulate prolactin secretion by blocking its inhibition by dopamine (1), we did a study of the prolactin responses to molindone and loxapine in normal men.

In this study, a butterfly cannula was inserted in the arm vein of three resting subjects and blood samples were drawn every 15 minutes for half an hour before and 2 hours after oral administration of the test drug. Blood samples were analyzed for prolactin by radioimmunoassay (2).

The pertinent findings were that molindone and loxapine, like such representative antipsychotic drugs as chlorpromazine, butaperazine, thioridazine, and haloperidol, stimulated prolactin secretion. In each subject, prolactin concentration rose from a baseline of less than 8 ng/ml to a peak of 25 ng/ml or more in the second hour after drug administration.

Nonantipsychotic phenothiazines such as promethazine, as well as other types of psychotropic drugs without antischizophrenic properties (e.g., diazepam, amitriptyline, and lithium) did not stimulate prolactin secretion.

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PETER H. GRUEN, M.D.
EDWARD J. SACHAR, M.D.
Bronx, N.Y.

Dr. Davis Replies

SIR: The information reported by Drs. Gruen and Sachar is an important addition to our knowledge on the mechanism of action of the antipsychotic drugs. With the addition of molindone and loxapine, which are the first drugs discovered in each of these two new classes of antipsychotics, there are now five classes of antipsychotic drugs that benefit schizophrenia. Evidence that these drugs also block dopamine receptors in man is provided by the fact that they cause extrapyramidal side effects and, more importantly, they stimulate secretion of prolactin, which is a hormonal marker for dopamine blockade. This provides evidence that a wide variety of antipsychotics have a hormonal effect in man consistent with dopamine blockade. Since it is unlikely that such structurally dissimilar drugs would share many common pharmacologic actions, this indicates that these drugs do block dopamine receptors in man, which is consistent with the hypothesis that the mechanism of their antipsychotic action lies in their dopamine-blocking properties.

JOHN M. DAVIS, M.D.
Chicago, Ill.

More on Creativity

SIR: In his letter "Death, Creativity, and Depression" (April 1976 issue) Terry E. Passman, M.D., presented a theory of creativity along with some misstatements and misrepresentations about the state of research in the field. He refers to "one of the few 'facts' about creativity upon which all students agree, Henri Poincaré's four stages of the creative process—preparation, incubation, illumination, and verification." Poincaré described his own creative thought, but Graham Wallas (1) was the individual who described these particular four stages of the creative process and was the author of the terms. Although it is true that there is some general acceptance of Wallas' terms and description, based in part on a poorly designed study by Patrick (2), a later study by

Eindhoven and Vinacke (3) disproved the factuality of these phases.

Much of Dr. Passman's theory is a restatement of formulations presented more fully by other writers on creativity such as Harry B. Lee and Otto Rank. For some reason, many persons in our field tend to assume there has been little research on creativity and that they have been the first to present theories and hypotheses, but the 9,968 citations in my own two-volume bibliography of scientific writings on creativity (4, 5) belie this assumption.

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ALBERT ROTHENBERG, M.D.
Farmington, Conn.

A Request

SIR: I recently saw in consultation an 81-year-old woman whose basic problems appear to stem from cerebral arteriosclerosis. Her husband told me he had read an article about a new type of medication that is being used to eliminate calcium deposits in the arterial tree. He did not remember the article and did not have a copy, but the notation he made leads me to believe that the medication he had in mind was cholestyramine.

He seemed to think that all I had to do was administer this medication once or twice and his wife would be able to get up out of bed and go back home and resume her duties. He told me that the article claimed over 4,000 people had been restored to normal activity as a result of having taken this particular medication.

Is cholestyramine being used for this purpose? If so, would someone write to me about its use, dosage, and the duration of treatment? Also, if some other drug is being used for this purpose, I would greatly appreciate learning about it.

FRANK M. JAMES, M.D.
George W. Jackson Community Mental Health Center
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A Behaviorist Omitted?

SIR: I think that "The Current Status of Behavioral Psychotherapy: Theory and Practice" by Isaac Marks, M.D., D.P.M. (March 1976 issue) was incomplete because the author failed to mention the important part Dr. Arnold Lazarus played in germinating and furthering behavioral psychotherapy (1).

The reference to other types of therapists using behavioral methods but labeling them as something else (e.g., Viktor Frankl's "existential logotherapy") could also be applied to behaviorists, who have, for example, renamed hypnotic techniques as relaxation, suggestion, fantasy, and imagery.

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EDWARD M. SCOTT, PH.D.
Portland, Ore.

Dr. Marks Replies

SIR: Dr. Scott is quite right in calling to our attention the fact that Dr. Arnold Lazarus, along with other workers, had a seminal role in developing behavioral psychotherapy in its early years. Dr. Scott is again correct in noting that many methods of treatment which are now labeled behavioral were used with different labels in the past. Role rehearsal, role reversal, and even doubling, which are now a part of social skills training, have been used for half a century in psychodrama. There is hardly a behavioral technique that has not been used at some time in the past under some other name and with some other theoretical justification. The only difference, perhaps, is that when used in a behavioral context the methods tend to be more systematized and the outcome more carefully measured, although this is not always the case.

ISAAC MARKS, M.D., D.P.M.
London, England

On Prophylaxis in Unipolar Affective Disorder

SIR: We have reviewed the evidence for drug prophylaxis of affective disorders (1, 2) and wish to clarify what gaps remain in our knowledge about prophylaxis of unipolar manic-depressive illness.

We will define two types of prolonged treatment studies: continuation and prophylactic. Continuation studies involve continued use of an agent immediately after disappearance of acute symptoms for about six months, the rationale being that organic therapy suppresses depressive symptoms without curing them and the underlying pathophysiology continues to run its course. In prophylactic studies, treatment is instituted when the patient is euthymic, with the expectation that the medication will prevent future episodes. A continuation study becomes prophylactic at some point, usually arbitrarily defined as six months after remission.

Conclusions about the prophylaxis of unipolar illness will have sweeping public health implications. Lithium is clearly of value in preventing mania in bipolar manic-depressive illness. Evidence for lithium prophylaxis in unipolar patients is strongly suggestive, but firm conclusions are unwarranted. Morbidity and mortality from lithium will increase as it is prescribed for prolonged periods, away from academic centers, and with poor supervision and laboratory facilities. Therefore, lithium's efficacy and risk/benefit ratio should be well established before its long-term use becomes widespread. These data have not been collected.

In order to safely interpret data that are not derived from

prospective controlled studies, we must be able to predict the course of unipolar illness, which is not currently possible. One group has suggested that morbidity of affective illness increases with time (3), another that a period of well-being follows a series of affective exacerbations (4). Consequently, only data from prospective placebo-controlled studies employing random assignment should be used.

Only three of the six most frequently quoted studies in which the prophylactic effect of lithium was tested in unipolar patients (5–10) involved random assignment to placebo or lithium and were double-blind (6, 7, 10). Two were so-called mirror image studies (5, 8), and one was an open trial with a retrospective control group (9).

Another report (11) supported a prophylactic effect of lithium in unipolar patients; however, 9 bipolar II patients (with a history of hypomania), 7 patients rediagnosed as "chronically depressed," and 8 other patients were removed from the sample. It was subsequently reported that bipolar II patients (12) and "chronic depressives" did not demonstrate lithium prophylaxis of depression. The removal of 24 patients undermined the definitively prospective nature of the study.

The remaining prospective studies (6, 7, 10) included 113 patients, approximately 40 of whom were men. Thus our present knowledge about lithium prophylaxis is based on data from fewer than 40 women and 20 men who actually received lithium in controlled prospective studies. Statements based on these results require confirmation in further trials with placebo comparisons.

The design of the Baastrup and associates (6) placebo-controlled discontinuation study of patients who had been asymptomatic on lithium for a prolonged period limits the generalizability of their findings. Patients with continuing symptoms often become disenchanted and seek other forms of treatment; thus it is likely there was attrition of lithium nonresponders before the controlled portion of their study began. Therefore, their results may indicate only that lithium has a prophylactic effect for some unipolar patients; no identifying features of this subgroup other than previous successful lithium treatment are provided.

One could generalize from pooling the analyses of Coppen and associates (7) and Prien and associates (10) that lithium has a demonstrable prophylactic effect, but the p value would not be overwhelming and the estimate of effect size would not be very firm. It would be worthwhile to pursue this work to help estimate effect size and to identify the boundaries of the drug-sensitive population.

There is some evidence that the mode of inheritance of depression may be different in men and women (13), so there may also be sex-related characteristics with regard to treatment response. One must be cautious when generalizing therapeutic effect from female to male unipolar patients—too few men have been studied to draw any conclusions.

In summary, we believe that the utility of lithium in the prophylaxis of unipolar manic-depressive illness is strongly suggested but not proven by prospective random-assignment placebo-controlled studies. Although there is evidence from so-called mirror image studies (5, 8, 14), these data should not be used in the final decision about lithium's prophylactic effect in unipolar illness. The only controlled study (10) found a prophylactic effect of imipramine in unipolar patients.

At present, before prescribing a prophylactic regimen for a unipolar patient, the clinician must assess severity, risk, and the likelihood of achieving a prophylactic effect. We hope that further studies will clarify the probablility of prophylaxis as well as the role of antidepressants in the prophylaxis of recurrent depressive disorder.

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Glen Oaks, N.Y.
JOHN M. DAVIS, M.D.
Chicago, Ill.

Some Observations on Maintenance Therapy

SIR: I appreciated the two overviews by John M. Davis, M.D., in the December 1975 and January 1976 issues of the *Journal*. I believe the subject of maintenance therapy has not received the attention it warrants and has been accorded low prestige within the field of psychiatry.

While working on the staff of St. Elizabeths Hospital and in private practice, I have had 40 or 50 long-term maintenance patients, almost all schizophrenics in remission. They are outpatients who live and (in many cases) work in the community. They often ask about decreasing or stopping medication and I always discourage this request. My thinking is that the social cost of a relapse into psychosis is too high a risk.

After a patient discontinues the medication, it may be many months, perhaps a year or more, before a relapse occurs. This increases the chances that the patient and his/her family will have lost contact with me or any psychiatric treatment facility, which complicates the situation greatly. Another factor is that patients at the point of relapse are often extremely negative about resuming medication or getting back into psychiatric treatment of any kind. In my experience it is

extremely unusual for such a chronic schizophrenic to resume taking the medication as an outpatient and go into remission without rehospitalization. Rehospitalization is almost always necessary, often under traumatic circumstances. The greatest problem with this seems to be loss of employment or retirement on disability, which could have been avoided. I would also like to note that none of these patients has experienced serious side effects.

GARY SINGLETON, M.D.
Washington, D.C.

Psychiatry, Cafeteria-Style

SIR: I attended my first APA annual meeting this May in Miami Beach, and for a couple weeks after it I was in a state of agitated perplexity. Then I had a flash of insight that rendered the experience coherent and freed me from the fetters of my confusion. I realized that I had not really been at a convention but rather at a cafeteria.

For appetizers there were morning panels and discussion groups. The "main courses" consisted of collections of papers designed to provide a balanced meal and available in a toto or a la carte. "Full course" meals were available, i.e., a day's worth of digestibles that focused on a particular subject. There were snacks—films, video, special lectures—some gourmet, some greasy spoon. For dessert there were after dinner panels and groups—more food for thought. The play "Equus" was presented, perhaps as a cleansing purgative or emetic.

By and large, the food was cafeteria quality—filling, but often rather bland or pasty, and frequently lacking spice or condiments. It was prepared for the masses and too often provided sustenance rather than nourishment.

When one left the cafeteria, one could find no remedy in the environs for dyspepsia or other gastric distress. Miami Beach has become a seemingly endless stretch of stucco-coated extended care facilities masquerading as hotels. Obsequious, tip-hungry servants pester one like eager mosquitoes. Pavement has consumed the tropical splendor that once was, and coconut oil is to be found only in suntan lotion. Miami Beach has been denatured, and no additives, colorings, or preservatives can correct the blight of environmental poisoning.

I am left with several questions. I ponder about the price of this meal and who pays it. Is there a proper etiquette for dining with this professional fraternity? And I wonder, what does one do with the garbage?

LLOYD SEDERER, M.D.
Cooperstown, N.Y.

Preciseness in Diagnostic Terminology

SIR: I wish to draw your attention to an inaccuracy in "Hypothalamic Tumor Presenting as Anorexia Nervosa" by Geoffrey B. Heron, M.D., and Donald A. Johnston, M.D. (May 1976 issue). The title is incorrect; the patient they described did not suffer from anorexia nervosa but from ordinary loss of appetite with nausea and vomiting. Except for his weight loss, he presented none of the characteristic features of anorexia nervosa, which are pursuit of thinness, frantic preoccupation with weight and eating, hyperactivity, and efforts at independence. The diagnosis of anorexia nervosa should not be made on the basis of absence of an organic explanation for weight loss or of vague psychological disturbances in a patient's history. Confusion about the condition is perpetuated when such nonspecific cases of weight loss are reported as anorexia nervosa.

HILDE BRUCH, M.D.
Houston, Tex.

Diphenylhydantoin Treatment of Bulimia

SIR: Richard S. Green, M.D., and John H. Rau, Ph.D., described successful treatment with diphenylhydantoin of 10 patients with compulsive eating (April 1974 issue). We treated a patient with a similar problem unsuccessfully with that drug.

The patient was a 25-year-old woman with a history of anorexia nervosa that began at age 19. From a normal weight of 47.7 kg she dropped to a nadir of 28.1 kg when she was 22. At age 23 she began to have episodes of binge eating. Continued psychotherapy and treatment with amitriptyline had no effect. An EEG taken before diphenylhydantoin therapy was initiated was interpreted as mildly abnormal—like those of the patients described by Drs. Green and Rau—because of lower frequency forms in the temporal and frontal regions, more prominently on the right. At the time diphenylhydantoin was begun, the patient's weight was 65.9 kg. She was treated with 100 mg of diphenylhydantoin 4 times daily for 5 weeks. During the last 3 weeks of this period she was also off amitriptyline (she had been taking 50 mg at bedtime). There was no remission of her compulsive eating, and at the end of the 5 weeks her weight was 67.7 kg. Thus, the successful treatment described by Drs. Green and Rau was a failure in our similar patient.

THEODORE WEISS, M.D.
LEONARD LEVITZ, PH.D.
Philadelphia, Pa.

Cogwheel Rigidity Early in Lithium Therapy

SIR: Baron Shopsin, M.D., and Samuel Gershon, M.D., reported on "Cogwheel Rigidity Related to Lithium Maintenance" in the May 1975 issue of the *Journal*. Their observation of this side effect was in cases of long-term lithium maintenance therapy; I have seen cogwheel rigidity appear early in the course of lithium therapy.

The patient I would like to describe was a 19-year-old male with bipolar illness who presented in an acute manic state. He had never taken lithium before. He was started on 300 mg of lithium 3 times a day and the regimen was increased to 2100 mg/day over a 2-week period. By the end of the third week, his mood had stabilized and his serum lithium level was 0.8 mEq/liter.

A few days into the fourth week, the patient complained of muscular tightness (in contrast, the patients reported by Drs. Shopsin and Gershon were asymptomatic). Physical examination revealed coarse bilateral cogwheel rigidity that did not respond to intramuscular benztropine (4 mg) or intramuscular diphenhydramine (50 mg). There was no akathisia or festinating gait. The usual signs of lithium toxicity, such as fine tremor, polydipsia, and polyuria were not present. Mental status examination revealed no evidence of an organic mental syndrome.

The patient's serum lithium level, however, had increased from 0.8 to 1.6 mEq/liter over 48 hours. (The level was 1.4 mEq/liter when remeasured the next morning.) The cogwheeling persisted until the lithium dosage was reduced 24 hours later to 300 mg 4 times a day. Complete resolution of both the cogwheeling and the subjective muscular discomfort coincided with return to previous serum lithium levels.

The patient had also been taking up to 30 mg of thiothixene daily for 3 months, but this had been discontinued 1 week prior to the onset of the phenomena I have described, and there was no earlier history of extrapyramidal signs.

The correlation between the fluctuating levels of lithium and the course of the muscular symptomatology indicates that cogwheeling should be considered as a possible initial sign of lithium toxicity.

RALPH D. BIEN, M.D.
New Haven, Conn.

Drs. Shopsin and Gershon Reply

SIR: In our article, we reported benztropine-resistant extrapyramidal symptoms (EPS) in the form of cogwheel rigidity during maintenance treatment with lithium carbonate. These symptoms occurred in outpatients who had 8–12 hour lithium blood levels within the therapeutic range, had no other symptoms of lithium toxicity, and were receiving no other medication.

Branchey and associates (1) have since confirmed our findings of EPS in patients on long-term lithium maintenance. In addition to cogwheel rigidity, these authors also reported other signs of EPS, such as rigidity, tremor, and positive response to a glabellar tap. One of the many problems in evaluating this essentially confirmatory follow-up study is the issue of concomitant use of other drugs, e.g., tricyclic medications, as well as previous ingestion of neuroleptics within 6 months of testing. The possible drug synergism makes the relative contribution of lithium difficult to assess and detracts from the findings. We have previously indicated that

> lithium, by virtue of toxicity or other physical properties, does appear capable of modifying brain tissue, bringing about decreased threshold tolerance or sensitivity to other drugs (e.g. phenothiazines or tricyclic compounds), even those previously tolerated prior to lithium ingestion. (2, p. 116)

Also, in the report by Branchey and associates, antiparkinsonian drugs were not given (not indicated) and the precise duration of treatment is not given for lithium or the tricyclic drugs. The only data offered with regard to treatment duration support our previous impression of a relationship between cogwheel rigidity and the duration of treatment with lithium. (Patients with cogwheel rigidity had taken lithium for 2 or more years; range of treatment duration was 6 months to 7 years.)

The fact that Dr. Bien's patient was given thioxanthine (thiothixene) in doses of 30 mg/day for 3 months prior to lithium therapy makes it difficult to single out lithium as anything but contributory to such symptoms of cogwheel rigidity. It is well known that it may take up to 6 months after treatment with neuroleptics before all the drug and its metabolites are no longer traceable in the blood tissues. An extrapyramidal symptom often can be expected to occur rapidly after initiation of lithium treatment in such individuals (3).

We would like to point out that parkinsonism and other signs of extrapyramidal involvement, albeit not well known, have long since been reported as symptoms of CNS involvement with acute lithium toxicity and poisoning (3).

We wish to thank Dr. Bien for providing us with the opportunity to make these comments.

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BARON SHOPSIN, M.D.
SAMUEL GERSHON, M.D.
New York, N.Y.

Corporate Inhumanity

SIR: I commend you on your Special Section, "Disaster at Buffalo Creek" (March 1976 issue), but I am troubled by its focus. James L. Titchener, M.D., and Frederic T. Kapp, M.D., wrote in "Family and Character Change at Buffalo Creek" that the disaster "was caused by the inexplicable inhumanity of a powerful corporation that gave terrible evidence of not caring about its employees or their community." Inexplicable to whom?

It is abundantly clear that corporate structure, like personality structure, reflects underlying energic relationships vis-à-vis the "external world." The raison d'être of corporate structure is the accumulation of profit; all other considerations pale beside this one. The aforementioned inhumanity is therefore a necessary condition of this structure, not an inexplicable aberration.

When the collected energies of a "body" (corporate or individual) are devoted to the attainment of one goal (money in this case), certain predictions can be made about the behavior of that body in peripheral areas. Such behavior will be characterized by aggressivity; there will be conscious and/or unconscious attempts at denial, isolation, doing-undoing, and the underlying wish structure will be permeated with fantasies of destruction and self-aggrandizement. One could also predict symptomatic expressions of this structure, and such predictions would be abundantly confirmed in the factories, mines, bureaucracies, etc., that this corporate organization oversees.

The disaster that occurred at Buffalo Creek is not inexplicable. What is inexplicable is that this grossly visible schema of operation, where the likelihood of profit is the only rationale for the expenditure of energy, remains largely unaddressed by psychiatrists, whose professional lives are filled with its casualties. Can we continue to remain silent on the systematic problem and focus only on its symptomatic expressions, e.g., the victims of Buffalo Creek?

Incidentally, I would like to know if the group of mental health workers at Buffalo Creek had the opportunity to interview the management of the coal company. I would imagine

that they too underwent adaptive psychological processes, including the formation of symptoms. It would be especially interesting to know what adaptive defenses were most utilized by this group and to try to answer the question, How do they continue to do what they do in the face of the overwhelming evidence of their own "inexplicable" inhumanity?

DONALD B. MOSS, M.D.
Brooklyn, N.Y.

Drs. Titchener and Kapp Reply

SIR: We agree with Dr. Moss that the use of the adjective "inexplicable" was ambiguous in our paper. We intended to indicate the disaster was not explicable to the survivors because they could not conceive of the inhumane and uncaring attitude of the mine owners who were also their employers in many cases.

Many large conglomerate businesses, because of diffuse ownership, absentee top management, and the varied and spread-out nature of their business activities, have little personal contact with the people they serve and also the people they employ. Many casualties occur in the middle-management executives of such conglomerates and the members of their families as well as in the ordinary workers.

Like Dr. Moss, we wonder whether profit is incentive enough to resolve the many complex psychological, economic, and political problems that face the nation and the world today. There are follow-up studies under way with the surviving victims of the disaster at Buffalo Creek so that we can learn about its long-range effect. The successful law suit may have had a restraining and moderating effect on the policies of mining companies in the Appalachian area. Only the future will tell.

JAMES L. TITCHENER, M.D.
FREDERIC T. KAPP, M.D.
Cincinnati, Ohio

A Program Problem?

SIR: Joel Yager, M.D., and Robert O. Pasnau, M.D., have made an important contribution to psychiatric education by attempting to clearly delineate the tasks and educational goals of residents at different stages in their training. However, the program they described in "The Educational Objectives of a Psychiatric Residency Program" (February 1976 issue) lacks any attention to an area that requires the learning of skills necessary for one to become a "complete" psychiatrist, i.e., community psychiatry.

I believe that by the end of the resident's training, he or she should have developed the skills necessary to become, in Cohen's words (1), a "collaborative co-professional." Nowhere in the Yager and Pasnau article do they give any attention to this issue. Cohen has outlined the roles and tasks, an outline I expanded (2), emphasizing the many skills of the resident as generalist as well as specialist. Drs. Yager and Pasnau neglected the following goals that can best be learned in a community psychiatry setting: administration, leadership and management skills, teaching and supervision of other coprofessionals, community and agency consultation, long-term treatment of the severely dysfunctional patient, and elements of geriatric psychiatry.

By adding these areas of proficiency to the outline proposed by Drs. Yager and Pasnau, the psychiatric residency training program may be considered to be relatively complete. Any trainee, of course, may elect to underutilize some aspects of the skills and knowledge gained anywhere along the way, but the opportunities to learn the skills must be present in all programs if the goal is, as I would hope, to produce competent general psychiatrists.

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KENNETH SOLOMON, M.D.
Albany, N.Y.

Drs. Yager and Pasnau Reply

SIR: Dr. Solomon raises an interesting point regarding what he terms the lack of attention to an area required for one to become "a complete psychiatrist"—the area of community psychiatry. We would agree that the goals he lists—developing leadership skills, teaching and supervising of other coprofessionals, essentials of consultation work, long-term treatment of the severely dysfunctional, and geriatric psychiatry—represent important skills and knowledge areas in a residency program. However, we wonder if they must necessarily be learned in a community setting. We believe that a consultation-liaison setting in a medical center can provide ample opportunity for the resident to develop these skills (1). We would question whether administration, community consultation, and agency consultation are a required part of the core curriculum for first- and second-year residents. In our program, we provide a third-year track for residents interested in these special areas.

In summary, there are many paths to Mecca. It is our hope that each program will develop its own unique routes. We welcome letters like Dr. Solomon's in our continuing effort to modify and improve the educational objectives in our psychiatric residency program. His letter has helped us in this effort.

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JOEL YAGER, M.D.
ROBERT O. PASNAU, M.D.
Los Angeles, Calif.

A Question of Significance

SIR: In their article "An Investigation of the Postpsychotic Depressive Syndrome" (January 1976 issue) Thomas H. McGlashan, M.D., and William T. Carpenter, Jr., M.D., found that "patients in the depressed group received psychoactive drugs more frequently." However, they reported that this relationship was not statistically significant ($\chi^2=3.35$, $p=.07$, Yates' correction applied).

Constructing the 2×2 table shown below (PPD=post-psychotic depressive syndrome) and using Fisher's exact test, I found p=.033, which meets the usual criterion of p<.05 for significance.

	Drugs	No Drugs
PPD	10	5
No PPD	4	11

MICHAEL FEINBERG, M.D., PH.D.
Ann Arbor, Mich.

Drs. McGlashan and Carpenter Reply

SIR: For chi-square with Yates' correction and Fisher's exact test, p=.033 by the one-tailed test. However, for the more conservative two-tailed estimate, p=.067. We rounded this figure to p=.07 and reported it in our article.

THOMAS MCGLASHAN, M.D.
Rockville, Md.
WILLIAM T. CARPENTER, JR., M.D.
Larchmont, N.Y.

They Hear Music

SIR: Ross and associates (1) reported 5 cases of auditory hallucinations in nonpsychotic deaf patients. The patients' hallucinations consisted of continuous, vividly perceived music that reflected their musical memories. They were reluctant to discuss the problem lest people think them crazy.

I recently encountered a similar case in a 63-year-old man who had been beaten on the head 15 years previously. He is not deaf but has had tinnitus since the injury. He is in intensive psychotherapy with me for depression and is clearly not psychotic.

In April 1975 he began to hear entire songs in four-part harmony, and sometimes sings the tenor solo along with the songs. He finds the experience relaxing unless he dislikes the song, at which point he is able to change the music by singing aloud "amen." I might add that his favorites are Handel's "Messiah" and songs by Victor Herbert.

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WILLIAM L. CLOVIS, M.D.
Philadelphia, Pa.

The "Ultimate Overstatement"?

SIR: In her editorial "Rape: 'The Ultimate Violation of the Self' " (April 1976 issue) Elaine Hilberman, M.D., appears to be carried away to such an extent that she detracts from the serious and scholarly tone and import of the papers in the topical section on rape and other forms of violence. For the sake of hyperbole, Dr. Hilberman chooses to bury in the fifth paragraph of her editorial the more accurate continuation of her title, namely, "Rape is 'the ultimate violation of the self' . . . *short of homicide*" (emphasis added). For thousands of years it has been men who have been sent off to wars to be killed and mutilated, men who have been the main victims of an unhappy assortment of homicidal activities, official and unofficial, and even men who have been the most "successful" suicides among the sexes. Just what is, we may ask, this "ultimate violation of the self"?

Again we find a surprising and gratuitous outburst of indignation when Dr. Hilberman states "It is not surprising that the four papers on rape in this issue were written by women." I have had no difficulty finding numerous articles and books by men on the subject that are empathic, significant, and helpful without ignoring or denigrating the unfortunate victims of forcible rape.

ROBERT L. GOLDSTEIN, M.D.
New York, N.Y.

Dr. Hilberman Replies

SIR: Having spent the last three years involved in rape-related projects, I am no longer surprised at the intensity of affect elicited by this issue. Dr. Goldstein is obviously angered by my position, with the main intent of his letter coming in the form of a character assassination. I find nothing substantive in his remarks, however, that would warrant a response.

ELAINE HILBERMAN, M.D.
Chapel Hill, N.C.

Pulling a White-Coated Tale

SIR: The excitement generated by Dr. Ronald J. Blank's letter about his inspiring experience with Sigmund Freud's tailor ("A White-Coated Tale," March 1976 issue) almost persuades one to overlook some temporal inconsistencies in the old tailor's account of his sartorial dealings with the father of psychoanalysis. While accepting this discovery as a valuable addition to the history of psychoanalysis, one must question the reported age of Dr. Blank's informant. The old man's vanity has led him to subtract a quarter of a century from his age, and in this vain peccadillo a larger fraud is revealed. Let me explain.

If one subjects Dr. Blank's report to the exegetical study such an important document deserves, one discovers that if the tailor was indeed in his "mid-eighties" when Dr. Blank encountered him, then, on the "fine day in the last part of the nineteenth century" when Freud entered his shop, the tailor must have been a precocious 5-year-old apprentice. Even more incredible was the outspoken lad's announcement to his distinguished customer when Freud came back to the shop a week later, "Well, Sigmund, I have known you for 10 years. . . ."

As I puzzled over this riddle, mourning the loss of the historical vistas opened by Dr. Blank's discovery but slammed shut by the hard facts of arithmetic, my dejected gaze fell upon a dog-eared copy of Grimms' *Märchen*.

In a flash, the solution to the conundrum revealed itself to me. The old tailor was none other than that protean gnome, Rumpelstilzchen. Still smarting from his defeat at the hands of that clever girl, and seeking revenge, he had fastened his hatred upon that famous student of myths and fairy tales, Sigmund Freud. It was at once obvious that the evil elf had diverted the distinguished scientist from his efforts to penetrate the mysteries of mythology by focusing attention upon

the trivia of the doctor's professional attire. No doubt he had hoped to wreck a noble career and, at the same time, to save the world of the Little People from the deflations of psychoanalysis. Failing in this malignant plan, the ageless incubus had fled the scene of his downfall, disguised as a tailor. On the heels of the psychoanalytic diaspora he had made his way to the New World, where he continued his campaign against the forces of enlightenment.

Happily, we can all breathe easier now that the threat has been removed. But for Dr. Blank's fortuitous visit, the impostor might have done serious damage to the scientific reputation upon which modern psychoanalysis rests. As we all know, however, exposure of these cases invariably destroys the evil spell and the danger evaporates. Once again, as any editor could have predicted, evil has been thwarted by timely publication of the facts. You are to be congratulated.

There is no need to thank me for my small addition to Dr. Blank's great discovery. The pleasure I have had in reporting it is reward enough.

DOUGLAS A. SARGENT, M.D.
Grosse Pointe Farms, Mich.

Dr. Blank Replies

SIR: In this day and age, the lot of an historian is never an easy one, particularly when his work is read by such a keen observer and exegetic as Dr. Sargent. I can still recall the words muttered by my mentor from the Department of History as he handed me my diploma on graduation day. As he shook my hand he looked me straight in the eye and intoned these words: "Thank God you are going into medicine!"

I must thank Dr. Sargent for pointing out the discrepancy in the tailor's age. After reading his quite plausible explanation for this discrepancy, I decided that I had but one choice if I were to regain my decidedly blemished image as an historian. I took the first plane to New York and rushed to the tailor's place of business.

There he was, sitting behind his sewing machine, singing happily to himself as he worked. He recognized me immediately and grasped my hand warmly. "So, Blank, how's the shrinking business in Ann Arbor?" he asked with a touch of sarcasm in his voice.

"Couldn't be better!" I responded. "However, there is a small matter that has arisen and so I have come to see you." I showed him the letter from Dr. Sargent, which he proceeded to read, chuckling to himself as he went.

"So, my friend, you are not much of a mathematician. Your clever friend has found me out. You psychiatrists are a clever lot. It is so—I lied to you. My real age is 105—I was born in 1871."

"But, why did you not tell me the truth—why have you embarrassed me so?" I asked.

"You—you are embarrassed because of a little white lie told by an old tailor. Shame on you! There are more important things in life than this."

"For instance?" I replied.

"For instance. For instance, he asks! Well, I'll tell you a for instance. What about my love life? What does a 70-year-old widow want with a 105-year-old man? There's no prospect in it. But a distinguished tailor in his mid-eighties—now this is another kettle of soup."

Just then the door opened and a very attractive elderly woman walked in, dressed in a mink coat and smelling like a fresh lilac. With a glint in his eye the tailor bounded up from his stool. "Anna, how nice to see you. Dr. Blank was just leaving. Come into the back—I have some hot tea and schnechen ready; also a new Wagner record I want you to hear." With that he took her by the arm and gently but firmly led her to the back room, having put a "closed" sign on his window. Before he disappeared he turned to me and said: "So, my friend. Do me a favor. Go back to Ann Arbor. There are more important things than to question an old man's age. You know, God created the earth in six days and on the seventh day he rested. As for me, I rested a little on the first and second days—so who the hell has time to rest on the last? Sei gesint!" And he was gone.

As I left the little shop, I could hear the gentle strains of a Wagnerian waltz amidst the rising crescendo of a woman's pleasant laughter.

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Correction

An error occurred in "Presidential Address: Psychiatry 1976—The Continuing Revolution," by Judd Marmor, M.D. (July 1976 issue). On page 742, at the beginning of the second full paragraph, the sentence "The emphasis in contemporary behavioral therapy is on growth and adaptation. . ." should have read "The emphasis in contemporary behavioral theory is on growth and adaptation. . . ."

The Mythic Image. Bollingen Series C, *by Joseph Campbell, assisted by M.J. Abadie. Princeton, N.J., Princeton University Press, 1975, 540 pp., $45.00.*

With *The Mythic Image* Joseph Campbell has crowned three decades of creative contribution to the study of culture and mythology. Perusing the written text, which is richly interwoven with quotations and reproductions of great art and arranged so that the eye can roam back and forth between the written word and its visual referent without flipping pages, is in itself a moving aesthetic experience. A critical review designed for psychiatrists is difficult because the point of view of *The Mythic Image* is broader than that of any single discipline and intentionally defies categorization.

The book is meaningful at many levels. Most evidently, Campbell demonstrates that the major civilizations of the world share a significant body of mythological motifs: the world dream and the world dreamer, the world mountain, the great mother, the miraculous child, the sacrifice, the resurrected hero, the serpent guide, the flower support, and many more, some of which involve complex spatial orientation and mathematical formulation. Through detailed analysis of these motifs throughout the world's time and space, Campbell makes a convincing case for their origin in the simultaneous resonance of the personal physical and fantastic experience, the immediate interpersonal environment, and the perceived mathematical order of earth (the seasons) and the celestial bodies (astronomy). His data suggest an origin of ideas in the early Bronze Age in the Near East and their transmission by diffusion throughout the rest of the world, including a hypothesized series of pre-Columbian transoceanic voyages.

The book cannot be subsumed within any single discipline because Campbell views mythology as a way in which man transcends objective categories. *The Mythic Image* jolts the reader into reconsideration of the Cartesian dualistic thinking that is characteristic of our "Western" minds. He confounds our belief in the distinction between subject and object and in the logic with which we assert that A is not not-A. He demonstrates the identity of the macrocosm and the microcosm in mythological relationships between some of our commonly accepted dualities, such as people and their perceived objects, the external and the internal, waking and dreaming, and life and death.

What is particularly impressive about *The Mythic Image* is that Campbell not only writes about his subject matter (poetry, art, history, science, philosophy, theology, religion, myth, and the questionable status of the dualistic distinction between subject and object), but he has also created a work that is identical with his subject, that is to say a piece of literature, art, philosophy, and theology. The reader will experience subjectively some of the very things Campbell writes about objectively.

The Mythic Image is of specific interest to psychiatrists. Students of object relations before the development of capacity for mature self-object differentiation (i.e., symbiotic, transitional object, and self-object relations) and students of early narcissistic development involving idealization and devaluation will find Campbell's descriptions of nondualistic thinking in various cultures and mythologies of great interest.

Campbell's description of Eastern religions, which assert that mythic figures are products of individual fantasy, is suggestive of relationships among psychiatry, psychoanalysis, and religion. The Buddhist Brihadaranyaka Upanishad asserts, "Whoever worships another divinity than his self, thinking, 'He is one, I am another' knows not." A Buddhist model of the mind, the Lotus stages in Tantric Yoga, postulates personal responsibility and psychic determinism, recognizes the existence of fantasy and projection, and hypothesizes a developmental hierarchy remarkably similar to Freud's psychosexual stages, in which successive preoccupations with anality and holding on, genital sexuality, and then power precede acquisition of sublimatory capacity and creativity. The goal of Yoga is to transcend the first three stages of living in a dualistic world.

The Mythic Image may stimulate the thoughtful reader to consider the future of Western culture and psychoanalysis. Our current interest in altered states of consciousness; mounting criticism of the glorification of sex, violence, and the dualism-based disciplines of science and technology; and heightened awareness of the problems of death and dying may reflect culture change. Should it become more personally important to achieve goals beyond sublimation, Eastern mythologies will have much to teach us personally and may also lead us as psychiatrists to reconsider our assumption that attainment of genital sexuality connotes normalcy and that states of self-object undifferentiation must be synonymous with infancy or psychosis.

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Psychopharmacogenetics, *edited by Basil E. Eleftheriou. New York, N.Y., Plenum Press, 1975, 468 pp., $28.00.*

Research in biological psychiatry has lately taken two paths: 1) the biochemistry of mental processes, closely linked to pharmacology, and 2) the genetics of psychiatric disorder, studied with a variety of new designs and techniques. The editor of this volume has brought together a group of papers that attempt to combine these two approaches in a new "double-hybrid science." Although this science is in its infancy, *Psychoparmacogenetics* emphasizes the fact that drug response—including drug abuse and drug idiosyncrasy—may vary with the genotype.

The difficulties of research in this area are not minimized. Fuller and Hansault discuss the role of background genes and the developmental environment, including the psychological burden on the individual of deviant reaction to drugs. Animal research has so far supplied much of the experimental data, and many of the chapters in the book are based on studies with mice.

Eleftheriou and his colleagues exploit an inbreeding technique (recombinant-inbred strains) that makes possible efficient genetic segregation and linkage analyses of loci responsible for particular drug responses. In these and other papers, variability in response to morphine, amphetamine, ethanol, and anesthetics is considered in relation to possible genetic determinants, although, as Oliverio and Castellano point out, the environment—including past experiences—can modify or abolish the effect of drugs.

An excellent and up-to-date review of genetics and alcohol consumption is provided by Eriksson, who covers such topics as twin, family, and adoption studies and the search for genetic markers. As with all clinical investigations involving genetics or pharmacology, the definition of the index population is one major difficulty. The other is the separation of genetic from environmental influences. Eriksson also describes the use of inbred rodent strains to study metabolic differences.

Another chapter of clinical interest is Omenn and Motulsky's review of clinical and experimental work on pharmacogenetics in man. The therapeutic and side effects of such drugs as succinylcholine, phenelzine, isoniazid, phenytoin sodium (Dilantin), nortriptyline, and the phenothiazines are related to gene-controlled pathways of metabolic excretion or activation. A survey of genetic findings in affective disorder is presented in the framework of the biogenic amine hypothesis, leading to the possibility (not yet achieved) of defining etiologically distinct types by means of drug response. The same hope is voiced in schizophrenia, although these authors feel that less progress has been made with schizophrenia than with the unipolar and bipolar affective disorders. Further discussions in this chapter relate to the hyperactivity syndrome, seizure disorders, and single-gene inherited diseases, such as the porphyrias, familial dysautonomia, the Lesch-Nyhan syndrome, and Huntington's disease.

The final chapter of the book, by Elias, describes multivariate statistical methods for the analyses of variance needed in this complex field.

In general this volume is well edited and up-to-date (the references are dated through 1975). There is some duplication and padding, and a few chapters dealing with drug side reactions have little to say about genetics. However, the book opens the window to an approach with important practical and theoretical implications.

Genetic differences in response to drugs will have to be considered more and more by the patient, by the clinician, and, as Kalow and LeBlanc emphasize, by society and the law. The field opened by this new approach should give the final blow to the nature-nurture dichotomy and the concept that genetic factors make for therapeutic nihilism. What clearer examples can there be of genetic-environmental interaction than those provided by psychopharmacogenetics?

JOHN D. RAINER, M.D.
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The Year Book of Psychiatry and Applied Mental Health 1976, *edited by Francis J. Braceland, M.D., Sc.D., Daniel X. Freedman, M.D., Arnold J. Friedhoff, M.D., Lawrence C. Kolb, M.D., Reginald S. Lourie, M.D., and John Romano, M.D. Chicago, Ill., Year Book Medical Publishers, 1976, 420 pp., $28.95.*

This annual publication reviews current psychiatric literature from mid-1974 to June 1975. The abstracts are grouped under the following headings: Neurophysiology, Biochemistry and Pharmacology, Psychology and Psychophysiology, Genetics, Learning and Memory, Mental Retardation, Child Psychiatry, General Clinical Topics, Clinical Psychiatry, Geriatrics, Psychosomatic Medicine, Psychotherapy, Psychoanalysis, Pharmacotherapy, Behavior Therapy, Psychiatric Nursing, Alcoholism, Drug Addiction, Drug Abuse, Suicide, Medicolegal, Community Psychiatry, and Social Psychiatry.

The editors, all of whom are well-known and experienced men in the field of psychiatry, have done a masterful job of selecting material that is important and pertinent. Their abstracts are clear and concise and reflect good editing without gimmicks. Their comments, which introduce most of the sections and follow some of the abstracts, are particularly good; one is left with a feeling of regret that there are not more of them throughout the book. The section titled Clinical Psychiatry is especially notable for such comments.

In his introduction to the book, Dr. Romano deals directly with a crucial issue when he writes that "the major function of Psychiatry, and one unique to it, is that it serves as a crucial bridge between genetics, biology and clinical medicine on one hand, and the behavioral sciences on the other." He emphasizes the need for psychiatry to "reaffirm our traditional and fundamental membership with medicine." These statements set the tone for a book that constantly reminds the reader of the medical orientation of psychiatry.

The busy psychiatrist who tries to keep pace with the ever-expanding literature will appreciate this book. He or she will be able to quickly review a large number of articles and then select those which he or she wishes to read at leisure in their original form. It provides a good way for those preparing for Board examinations or for the self-assessment test to survey current literature. In these days, when it is more important than ever for a physician to keep up in his field, a book like this is a welcome addition.

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Auditory Competence in Early Life: The Roots of Communicative Behavior, *by Rita B. Eisenberg, Sc.D. Baltimore, Md., University Park Press, 1976, 310 pp., $18.50.*

This is a difficult book to struggle through for someone who is not acquainted with the technology of audiometry and the instrumentation used in its practice and research. This technology ranges from the production of pure tones and the mere counting of the heart rate to the computer production of speech sounds and the interpretation of EEGs under various conditions of auditory stimulation. I found it worth the effort to follow the finely drawn scientific logic according to which many experiments have been organized into tentative schematics to interpret how sound becomes meaning.

Auditory Competence is essentially a report of the work of the Bioacoustic Laboratory of the Research Institute of St. Joseph's Hospital in Lancaster, Pa., from 1961 to the present. Dr. Eisenberg is the director of the laboratory. The research team included pediatricians, technicians, biochemists who shared their research populations with the laboratory, and, perhaps most important, an obviously cooperative and enthusiastic nursing service. The goal of the Bioacoustic Laboratory was to gain an understanding of the central nervous system mechanisms for dealing with sounds in such a way that, when all is well, sounds end up as a medium for

communication. The basic experimental mode by which this goal is approached is to study the development of the hearing and communicative functions in the growing infant. The work is far from complete, but this book provides an organized template on which findings are much more productively interpreted than has been the case in the past.

The book begins with the known neuroanatomy and physiology of the process of sound's transformation into meaning. Perhaps the most interesting simple finding is that sounds used in communication appear to be processed more by the right ear (left hemisphere), and other types of patterned sounds are integrated in the right hemisphere. This finding is dependent on the earlier finding that syllables ultimately to be used in communication are differentially effective in getting the infant to attend than are such pure tones, noises, and patterned sounds as music.

In the last decade or two, psychiatrists have become used to thinking about the biochemical substrates of normal and abnormal human behavior, but there has perhaps been a decline in attention to the sensory mechanisms that furnish the stimuli to set off the biochemical substrate. This book suggests the detail that psychiatrists must somehow incorporate into their psychodynamics as they attempt to find the significant input factors and situations that indicate what meaning will be placed on sounds by the higher integrative centers in the brain.

This book is a helpful reminder of the complexity that underlies the simplest of psychodynamic formulations.

PAUL V. LEMKAU, M.D.
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To Each His Farthest Star: University of Rochester Medical Center 1925–1975, *edited by the University of Rochester Medical Center Publications and Publicity Committee. Rochester, N.Y., University of Rochester Medical Center, 1975, 539 pp., no price listed (paper).*

This interesting volume commemorates the 50th anniversary of the University of Rochester Medical Center. It consists of a series of 32 essays by such officials as university presidents and faculty members of the institution and an appendix by John Romano, Distinguished Professor of Psychiatry. Robert S. Morrison, an outstanding physician and former foundation executive, writes an "Outside View." The publications committee worked for a period of 2 years to put together a comprehensive and fascinating story of the birth and growth of a medical school. The essays presented give a selective history of the major developments in the school's history; in so doing they provide a running account of the major issues that beset medical education in this country during that half century.

The book is dedicated to George Hoyt Whipple, Nobel laureate and dean of the school from 1921 to 1953. This tenure is of itself remarkable as one thinks of the very short halflife of medical school deans today. Wallace O. Fenn, Distinguished Professor of Physiology and himself a bit of a legend, made the address when an auditorium was dedicated to Dr. Whipple in 1950; the book begins with a record of that address.

The early years of the medical school are introduced by Dr. Atwater, Professor of Medicine. His fetching title is "A Modest But Good Institution . . . and Besides There Is Mr. Eastman." In reading this work one gets the feeling of the warmth of an official family with a wonderful dean and a capable, dedicated faculty, all of whom are proud of their school.

The essays maintain a high level throughout the volume, ending with John Romano's delightful description of the hunt for an essential recording under the title, "Everything *Is* Up-to-Date in Kansas City." Naturally, the book will have most interest for those who have had any connection with the University of Rochester, but it does, as the publications committee hoped, "provide a window through which one may look out upon the broader scene of medical education, research, and clinical service in the nation at large."

F.J.B.

Involuntary Treatment of the Mentally Ill: The Problem of Autonomy, *by Michael Alfred Peszke, M.D. Springfield, Ill., Charles C Thomas, 1975, 146 pp., $10.75.*

This brief monograph deals with legal and psychiatric implications of involuntary commitment and involuntary treatment of the mentally ill. Dr. Peszke takes his stand on the medical model, which is everywhere under attack and is rapidly being rejected in the courts and repudiated in the legislatures of the United States.

Dr. Peszke excised the intellectual heart of this monograph and presented it in this journal (1). Having commented on that article (2), I looked forward to this monograph, but I found it somewhat disappointing. Peszke comes through in this text as a first-rate clinician with a good mind and a genuine understanding of the legal issues. There are real insights everywhere, but he could have used good editing. For example, he is uncertain about his audience and therefore does not provide enough basic psychiatry to orient the naïve lawyer or enough basic law to orient the naïve psychiatrist. Important ideas are tossed off without being explored and developed, e.g., the practical limitations of the due process model and the standard of dangerousness.

In developing his own position Dr. Peszke rejects the radical critics of psychiatry without confronting their arguments about the ontological status of mental illness. He also fails to confront the more prosaic problems of diagnostic reliability and validity.

Not having met these criticisms head on, he is forced to rely on argument by analogy; e.g., because we would treat an unconscious patient with a subdural hematoma we should treat the mentally ill patient with an acute schizophrenic disturbance. Arguing by analogy in this way begs all of the tough questions.

Peszke perceptively recognizes that, however weak its foundation, the central premise of any medical model must be the idea that the mentally ill are incompetent to act in their own interest. As he inelegantly puts it, "Mental illness coerces the free will." Thus Peszke places at the center of the medical model the presumption of the lack of free will. In contrast, the entire thrust of recent legal developments is to presume competence and to give the mentally ill their rights whether they are able to exercise them or not.

I think I can take Peszke's side in this argument, but I wish he had made it clearer which mental illnesses "coerce the free will."

For the reasons already stated, I cannot recommend this book to the average clinician. However, Dr. Peszke demonstrates a level of understanding of the issues that will delight those who are familiar with the field. The discipline of forensic psychiatry faces a knowledge explosion; it requires a

growing cohort of scholars who understand both the psychiatric and the legal issues. The author of *Involuntary Treatment of the Mentally Ill* can be counted in that small group.

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The Nuremberg Mind: The Psychology of the Nazi Leaders, *by Florence R. Miale and Michael Selzer. New York, N.Y., Quadrangle/New York Times Book Co., 1976, 302 pp., $10.95.*

Since Freud's pioneering study of Leonardo da Vinci, the application of psychoanalytic theory to the study of historical figures has gained increased interest and respectability in the scientific marketplace. The psychohistorian, like the psychoanalyst and the archaeologist, has to tease out conclusions and reconstructions from bits and pieces of surviving material. In few instances have these bits and pieces of surviving material included psychological test data on the figure under study. *The Nuremberg Mind* is a noteworthy exception because its two authors (one a widely respected Rorschach interpreter and the other a political scientist) lead us on a journey through the maze of Rorschach records (with interpretations) of 16 of the major Nazi war criminals who were tried in Nuremberg in 1945 and 1946.

The introduction, an interesting account in its own right, is provided by the psychologist who administered the 16 Rorschachs while he was assigned to the prison staff at Nuremberg. Beyond setting the stage for the research, his account allows the reader to evaluate the context within which each Rorschach response was delivered, including the nature of the patient-examiner relationship.

The meat of the book is, of course, the individual protocols and the authors' interpretations of them. This part of the book may be evaluated in terms of both substance and methodology. With respect to the former the material is fascinating. One is furnished a wealth of little-known raw clinical material as well as the opportunity to gaze over the shoulder of a gifted clinician as she skillfully moves from observation through inference to conclusion. Readers are invited either to compare their own responses to the blots with those of the war criminals or to pit their interpretations against those suggested by the author.

As to methodology, the book is not without shortcomings. Despite advance warnings, I found the test interpretations at times judgmental and at other times dictated by information beyond that which could readily be gleaned from the actual test responses. The acts of these war criminals are legendary. More than 30 years after World War II, they, together with the atrocities they perpetrated, still revive the deepest, the most primitive, and the most intense feelings in many of us. It is therefore difficult to imagine how a study such as this can be conducted without counterreactions and countertransference reactions playing a decided role.

Beyond limitations in methodology, this study of the personality structure of 16 Nazi leaders, using information obtained from Rorschach protocols, has a great deal to contribute to our understanding of such varied and important areas as primitive aggression, narcissism, object relations, superego development, and self-representation.

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Perversion: The Erotic Form of Hatred, *by Robert J. Stoller, M.D. New York, N.Y., Pantheon Books (Random House), 1975, 231 pp., $10.00.*

In this interesting book Stoller advances several ideas, chief among which is a psychodynamic theoretical position on the etiology of the "perversions," a term he dislikes but feels has some utility in labeling the sexual pathologies that have fantasied hostility at their core. The hostility may be self-evident (as in sadistic behavior) or covert and benign (as in peeping).

Stoller introduces his theory by pointing out that in the past decade or two research on aberrant sexual behavior has not focused on clinical psychodynamic investigation. Instead, it has seemed to accent that such behavior may be found in other species, is ubiquitous in man, and at times seems to be the product of brain and hormonal factors that can function independently of anything called psyche. The findings of these researchers make them "regret society's moral stance that sexual aberration is unnatural—sinful—and the repressive action that follows" (p. ix).

Stoller rolls up his sleeves and in his honest fashion wades into the psychological factors that he has found in the analysis of "perverted" patients. He is careful to label his formulation as theory and presents it as a position that others may examine and tear apart or modify. He strongly advocates that clinical investigation not be forgotten as a research tool.

Stoller separates out those sexual aberrations produced primarily as a lifelong attempt to "cure" psychic stress from those in which that dynamic is not at the root of the behavior. He says,

> I believe that perversion, but not all aberration, is a product of anxiety and that perverse sexual behavior has sprinkled through it remnants, ruins, and other indicators of the past history of one's libidinal development. . . . If the observer knew *everything* that had happened in the life of the person he is studying, he would find these historical events represented in the details of the manifest sexual act. The observer would then know when and why this person gave up what he would have most liked erotically, to choose the alternatives that are the perversion's scenario. . . . The perversion is a *fantasy* put into action—a defensive structure raised gradually over the years in order to preserve erotic pleasure. The desire to preserve that gratification comes from two main sources: (1) extreme physical pleasure. . . ; (2) a need to maintain [gender] identity. (p. xiv)

The author uses numerous case reports to illustrate the points he makes and carries the reader along in a convincing fashion to see how he arrived at his conclusions.

In the concluding section, titled Social Issues, Stoller examines several matters of current psychiatric interest. In the chapter "Is Homosexuality a Diagnosis?" he states that it is not and that it should be scrapped, not because of social pres-

sure to do so but because it represents a hodgepodge of differing etiologies and cannot function as a true diagnosis that has value for scientific understanding. He feels the same way about most of the other "diagnoses" of psychiatry.

In the chapter "Sex as Sin," Stoller observes that sexual "sinning" is a popular pastime in our society, wonders why, and finds the answers in intrapsychic dynamics. His first clue was the long-known fact that an awareness that one is sinning often markedly increases sexual excitement. On analysis he finds a correlate with the perversions, i.e., a sense, however dim, of a fantasied wish to hurt. As a strategy of social action, he suggests that those who wish to increase sexual freedom ought not lean too heavily on the argument that the sense of sin exists only as an effect of one's enslavement by repressive historical processes: "The sense of sin may not disappear simply because we announce that it is outdated, and the complex richness of human sexual excitement will be missed if we exclude sin from our studies" (p. 209).

The final chapter, "The Necessity of Perversion," is a wrap-up of the ideas he has put forward, namely, that these pathologies may be viewed as defenses against intrapsychic conflicts to preserve the gender identity of the bearer.

This book gave me a new frame of reference for looking at some of the perversions. I recommend its reading. It is written in an interesting, nontechnical manner that is almost conversational and therefore easy to follow. Jurists and clergymen would find, I believe, that it would furnish a larger lens for looking at some of the knotty problems they, as well as psychiatrists, face.

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Death Inside Out: The Hastings Center Report, *edited by Peter Steinfels and Robert M. Veatch. New York, N.Y., Harper & Row, 1975, 149 pp., $7.95; $3.50 (paper).*

Death has somehow lost the naturalness it was once accorded by physicians, families, and even dying persons themselves. Perhaps an illusion of environmental mastery stemming from scientific and technical advances has created an atmosphere in which the event has seemed an adventitious product of disease. As though immortal, dying men and their attendants have looked upon death not only as an unwelcome but as an unnecessary imposition. Whatever its origin, this attitude has made of death an event to be denied and opposed at all costs rather than one to be accepted as a natural ingredient in life and a potent force in shaping individual existence. It has made death the doctor's enemy and encouraged physicians to treat fatal illness as though it were curable disease. The result has been demeaning to the dying individual, the physician, and the community.

This attitude is commented on by the authors of *Death Inside Out*, a collection of essays from the Hastings Institute of Society, Ethics, and the Life Sciences. The authors offer penetrating analyses of current death-related beliefs and practices. Paul Ramsey, for example, expresses frustration with campaigns to naturalize, romanticize, or dignify death. For him, "death with dignity" has become a meaningless slogan serving only to impose its thoughtless dictates on the dying. He also reminds his readers that, although death may be a source of man's nobility, it is also a source of defeat and despair, an affront to the prideful mortal.

In a similar vein Leon Kass notes that dignity is, after all, a quality that only the dying person can supply; still, he urges those caring for the dying to avoid contemptuous treatment. Robert Morison, on the basis of his view that life and death are part of a continuum, believes that attempts to define death are scientifically and philosophically unsound and should be abandoned. Instead, he tells us that difficult decisions regarding the length of life must be guided by complex cost-benefit analyses. Dr. Kass counters that he sees no need to abandon the concept of death as a transitional state. He emphasizes that the physician's primary concern is always the welfare of his or her dying patient and believes that the interests of family and community should not be allowed to divert his or her attention. And so goes the discussion.

Essays from many disciplines—medicine, ethics, religion, and history, for example— are brought together in this volume in a spirit of thoughtful inquiry and debate. They are scholarly and stimulating. As with other collections of this kind, however, the book lacks a unifying theme and makes no attempt to deal with its subject systematically. Fostered in an atmosphere of continuing intellectual exploration, it lacks the practical grounding that would give it appeal for most physicians. Nevertheless, those with professional interest in death and dying will find the book rewarding reading.

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The Human Context: Environmental Determinants of Behavior, *by Rudolf H. Moos. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 437 pp., $18.95.*

"Whence come those mysterious influences which change our happiness into discouragement, and our self-confidence into diffidence? One might almost say that the air, the invisible air, is full of unknowable Forces, whose mysterious presence we have to endure."

This question, posed by Guy de Maupassant in his story "The Horla," has been answered admirably by Professor Moos in *The Human Context*. As psychiatrists we have as our chief interest the individual; we take a history, consider early formative influences, and place our patient on the dissecting table of the couch. Rarely, however, do we achieve the larger view and fully comprehend the human person in dynamic and ever-changing equilibrium with his environment. Moos has written an elegant and comprehensive account of the relationship between human behavior and the real world in which we live.

In the first part of his four-part book, Moos discusses the following trends in human-environmental relationships:

1. The broad historical and geographical perspective that attempts to explain the decline and fall of entire civilizations and whose most prominent exponent was Arnold Toynbee.
2. The growth of human and cultural ecology, including the epidemiology of mental illness and air and noise pollution, which has become particularly timely with the advent of the supersonic airplane.
3. Environmental determinants of health and disease, with attention to the natural and social climate in which people live.
4. The rise of organizations and bureaucracies. (Here, Moos refers to his own work demonstrating the effect of social climate in influencing the turnover rates of psychiatric wards.)
5. The relationship of experimental psychology and personality theory to social learning theories, conditioning, and social climate.

6. Architecture and environmental psychology.
7. The ecology movement, the sudden realization that planetary resources are finite, the conservation movement, and the "politics of less."

Professor Moos then states his own position, the social ecological approach, according to which he attempts (and succeeds in this, in my opinion) to synthesize our physical and social environments and their impact on the individual. At the same time the social ecological approach emphasizes individual adaptation, adjustment, and coping with an environment that may be stressful, limiting, selective, releasing, or challenging. In Moos's words, "We conceive of social ecology as the multidisciplinary study of the impacts of physical and social environments on human beings." Social ecology is humanistic and is dedicated to enhancing the quality of human environments, thus improving the quality of human life.

At the end of his extended introduction, after delicately skirting the question of free will, Moos goes on in the second and third parts of this book to consider in rich detail the physical and social environments. It would be difficult to select examples of Moos's style from the wealth of material cited. One idea that appealed to me is that just as doctors and dentists see their patients periodically for checkups, architects and designers should reexamine their creations to see if they are healthy. If they are diseased, like the Pruitt-Igoe housing project in St. Louis, Mo., for instance, one assumes that radical surgery in the form of the wrecker's ball should be applied.

In the fourth part of *The Human Context*, Moos discusses three selected Utopian environments: Thomas More's Utopia, B.F. Skinner's Walden II, and the experimental Oneida community of 1848–1880 in New York State. Moos is critical of all three Utopias, pointing out that they display only superficial understanding of man's relationship to the environment. Finally, Moos tentatively makes conclusions regarding human environments, including the effects of weather upon performance, physical space and building design in relation to behavior, and social climate and its effects on personality development. Moos argues persuasively for innovative procedures for helping people adjust to new environments. He feels that not enough attention has been paid to the milieu and its effects on the individual personality.

It is impossible in this brief review to do full justice to the vast landscape surveyed in this book. The work ends on an optimistic note, declaring that "our best hope for the future may be in a fusion of the visionary goals of utopian thinkers with the practical policies espoused by environmental advocates." This is an entirely appropriate conclusion in our bicentennial year to a book that deserves a place in every psychiatrist's library to contrast with and to complement everything written about individual psychology.

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Marijuana and Health Hazards: Methodological Issues in Current Research, *edited by Jared R. Tinklenberg. New York, N.Y., Academic Press (Harcourt Brace Jovanovich), 1975, 171 pp., $8.50.*

This volume contains 14 papers and 5 discussions from a recent conference on current concepts of effects of marijuana on human beings. Particular reference is made to marijuana's influence on genetics, immunity, testosterone, and the central nervous system as well as its role in the development of psychiatric problems. Representatives of most of the controversial findings or points of view are included. Indeed, the list of authors reads like a *Who's Who in Marijuana Research*, if there were such a volume.

The general point of view expressed is that marijuana is by no means harmless but that its effects are far less destructive than most drugs in common use (alcohol, heroin, cocaine, or, possibly, tobacco). Most of the firmly held differing opinions are clearly expressed, and even the confusion is well organized. For anyone wishing a succinct survey of the current state of informed opinion regarding the effects of marijuana on human beings, this volume is strongly recommended.

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The Psychology of Adolescence: Essential Readings, *edited by Aaron H. Esman. New York, N.Y., International Universities Press, 1975, 550 pp., $20.00.*

In this volume Aaron Esman brings the reader a treasure trove of material on the developmental aspects of adolescence, thus saving us many dollars and much footwork that would otherwise have been spent searching out the classic works presented here.

After giving Margaret Mead and a few others space to sketch in some cultural determinants, Esman provides the theoretical constructs of Sigmund and Anna Freud, Erik Erikson, Jean Piaget, Peter Blos, and Daniel Offer, each of whom discusses his or her point of view in his or her own distinctive style. Esman wisely introduces each chapter with only a few sentences designed to whet the appetite for what follows rather than interpreting or condensing the subject matter.

The third section of the volume covers psychopathology in a comprehensive manner, including alienation, role diffusion, homosexuality, and drug abuse—problems that some might consider normative crises rather than pathology per se. The articles chosen for inclusion here are less consistently excellent than those in the preceding section. The narrowness of focus and comparative shallowness of the treatment of drug use and psychosis are compensated for by the fine delineations of adolescent turmoil by James Masterson and of delinquency by August Aichhorn.

The fourth section of the book deals primarily with the influence of contemporary society on adolescent development and contains some outstanding contributions to the concept of superego development. In their article on the permissive society and the superego, Henry and Yela Lowenfeld note that today, "the decisive repressions concern not the id but the superego." They go on to show how the contemporary father who acts more like a weak older brother does not lead the child into a milder superego development but into an increase of fantasy and projections that magnify the power and cruelty of the parents.

Another exciting chapter in this section is E. James Anthony's on parents' and therapists' reactions to adolescents. He writes convincingly of the ways young people stimulate unconscious feelings of envy and longing in the adults with whom they interrelate—sometimes to the point of reactivating an adolescent crisis in a parent.

This is a book that, as its subtitle states, is indeed essential reading for the uninitiated. For the experienced clinician it provides a pleasant refreshment and, in its entirety, a source

of new ideas to be intrigued by for quite a space of time. This will make an excellent textbook.

GRAHAM B. BLAINE, JR., M.D.
Cambridge, Mass.

Alcohol in Colonial Africa. Finnish Foundation for Alcohol Studies, Vol. 22, *by Lynn Pan. Helsinki, Finland, Finnish Foundation for Alcohol Studies (New Brunswick, N.J., Rutgers Center of Alcohol Studies, distributor), 1975, 121 pp., $5.50.*

Drinking Habits Among Alcoholics. Finnish Foundation for Alcohol Studies, Vol. 21, *by Salme Ahlström-Laakso. Helsinki, Finland, Finnish Foundation for Alcohol Studies (New Brunswick, N.J., Rutgers Center of Alcohol Studies, distributor), 1975, 216 pp., $8.00.*

Alcohol in Colonial Africa is a monograph of general interest to all who are concerned about the history of alcohol use and abuse. Although there had been an African industry involving such beverages as pahn wine before the colonials came into power, the colonials produced a major new social problem in that alcohol became the payment for slaves. An early nineteenth-century African chief put it succinctly: "We want three things, powder, ball, and brandy, and we have three things to sell, men, women, and children." Thus the two great evils of colonial Africa—the slave trade and liquor traffic—became close partners.

Alcohol also became a major source of income through duties for the colonies. As taxes and duties rose, the quality of the alcohol dropped but not the volume. "Trade gin" was considered barely consumable for the colonists, who were assured a supply of good liquor from home. In fact, this supply was considered indispensable if civil servants were to be kept in the colonies; their rates of alcoholism were very high.

A series of international conferences on alcohol control was largely ineffective because commercial factors were stronger than moral factors at these conferences. In all, Pan describes a rather unpleasant picture of man's greed and lack of concern for his brothers of another color.

Drinking Habits Among Alcoholics is a study of drinking habits before and after a revision in alcohol beverage legislation that took effect in Finland on January 1, 1969. A comparison is made of drinking habits in Helsinki and in two small rural communities in 1968 and 1969.

The studies show a sizable difference in absolute alcohol consumption among alcoholic men in different locales—24.5 l a year in Helsinki, 12.5 l in one small town, 6.0 l in the other, and 3.6 l for all of the men studied. The major difference between alcoholic and nonalcoholic men was not in frequency of drinking but in occasional large consumption.

The legislative change made "medium beer" (4.5%) more readily available by increasing the number of retail outlets from 132 to 17,460. This resulted in a 4-fold increase in medium beer consumption in Helsinki and a 12- and 28-fold increase in the two rural communities. Overall alcohol consumption went up 46%. Medium beer increased as a proportion of alcohol consumed, although less so for alcoholic men; use of nonbeverage alcohol declined; fewer people were abstinent; and alcoholic men in Helsinki had more days of drunkenness, although, surprisingly, fewer days of drunkenness occurred in the rural settings.

This study was of considerable interest in Finland because of the controversy between liberal and hardline attitudes toward controlling alcohol use and abuse. It would be of similar interest to us in the United States, but this book is not recommended for casual reading or for general education about alcoholism.

ROBERT A. MOORE, M.D.
San Diego, Calif.

Psychiatry and Mysticism, *edited by Stanley R. Dean, M.D. Chicago, Ill., Nelson-Hall, 1975, 398 pp., $15.00.*

This book is a compilation of papers presented at three symposia on metapsychiatry organized by Dr. Dean for APA, plus a few invited papers. Metapsychiatry is defined as "the base of a pyramid whose other sides are psychiatry, parapsychology, philosophy and mysticism" (p. 5). Obviously, this covers a lot of territory, a fact reflected by the book's contents—26 papers on a great variety of topics. Some are very general, some are reviews of specific areas, and some are detailed reports of experiments or experiences. The book is loosely organized into four sections. The first is a miscellany consisting primarily of general discussions; the second includes papers on energy fields and meditation; the third reports on work on psychic healing; and the fourth reports on experiences "involving an expansion or extension of consciousness beyond the usual ego boundaries and the limitations of time and space" (p. 314).

Some of the experiences recorded here would strain even the credulity of the White Queen in *Alice Through the Looking Glass*, who boasted that she could believe as many as six impossible things before breakfast. For example, some subjects under LSD are reported to have had "illuminating insights as to what it feels like when a snake is hungry [or] when a turtle is sexually excited" (p. 328). One wonders how the author knew whether the insights were illuminating or delusional.

The reader must frequently shift intellectual gears, as it were, in order to cope with the book's inclusion of phenomena that can be explained within the conceptual frame of Western thought and phenomena that cannot. The first group includes biofeedback, the relaxation response, Kirlian photography (which may simply be a means of detecting changes in sweating), and healing by laying on of hands. These phenomena do not violate Western concepts of time, space, or causality. Discoveries of hitherto undetected forms of energy or patterns of organization of the nervous system present no greater conceptual problems than the discovery of radio waves, bioluminescence, or the circulation of blood.

The other class of phenomena, for which there is no agreed-on encompassing term, can be explained only by the assumption that they occur in a different kind of reality in which events do not follow the conventional laws of time, space, and causality. This reality, which, incidentally, is remarkably similar to that of subatomic physics, is the seat of ESP, mental telepathy, clairvoyance, precognition, and transpersonal experiences. As Silverman points out in his excellent paper, such experiences cannot be studied by the usual methods of experimental psychology because the analytic mental set required by these techniques blocks the experiences. However, they can be approached indirectly by statistical methods that take into account their fluctuating and inconstant nature and by modern neurophysiological techniques that detect changes in stimulus sensitivity while persons are in these states of consciousness.

Despite the growing body of evidence for the existence of

transpersonal experiences, much of which is as rigorous as that for any phenomena accepted as valid, these experiences continue to be rejected by the majority of scientists. This attitude rests in part on the justifiable fear that to accept them would open the floodgates to superstition and error. Indeed, the field of parapsychology is a happy hunting ground for charlatans who prey on the self-deluded. The vehemence of the reaction of many scientists, however, is uncomfortably similar to that of true believers in any cosmology toward a rival world view.

Most of the contributors to this volume are well-known authorities; the chapters are clearly written and free of exhortation. Scholarly needs are met by adequate bibliographies and an index. Psychiatrists who are curious and brave enough to want to venture into the still largely uncharted seas of metapsychiatry will find this book to be a good guide.

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Cathexis Reader: Transactional Analysis Treatment of Psychosis, *by Jacqui Lee Schiff. New York, N.Y., Harper & Row, 1975, 193 pp., $9.95.*

This valuable book describes ways of understanding interpersonal transactions with difficult patients and establishing a problem-solving alliance. It defines ideas and behaviors, including those from transactional analysis, operationally. Given that healthy individuals are aware of themselves and their environment, spontaneous in responding, and capable of intimacy, what do people who appear unaware, unresponsive, and withdrawn do with their energy (cathecting)?

The answer given by Schiff and collaborators is that these people use passive behaviors, i.e.: 1) doing nothing, 2) overadapting (conforming to external demands like an automaton), 3) agitation (such body or verbal activity unrelated to problem solving as smoking, pacing, and circular talking), and 4) violence or incapacitation (violence and incapacitation are together because both follow increasing agitation).

To maintain passive behavior these patients use discounting, grandiosity, and thought disorders, i.e., overgeneralizing, overdetailing, and escalation. The passive behavior is intended to establish a symbiosis in which two or more people behave as if they form one whole personality containing the three major ego states of Parent, Adult, and Child.

The developmental scheme elaborated in *Cathexis Reader* includes the child's developmental needs and activities and the complementary symbiotic activities of the parents for each stage. If the parents do not provide the phase-appropriate responses or if they attempt to prevent the normal disruption of each symbiosis by growth, pathology may result. This is understood as an attempt to get needs met by attempting to reestablish the symbiosis at the point where the frustration occurred or to reestablish the symbiosis that was successful before the frustration occurred.

For instance, the agitated patient paces, saying, "Doctor, can't you do something?" If the doctor enters this symbiosis, he or she becomes the Parent who nurtures and the Adult who figures out what to do. The patient becomes the Child who feels bad and needy. This discounts the ability of the patient to cathect his or her own Parent and Adult as well as the feelings and needs of the doctor.

The therapist chooses the ego state he or she believes will be effective, deciding whether entering the symbiosis is desirable. The Parent says, "You sure sound upset. Slow down. Take it easy." Instructions are then given forcefully. The patient then overadapts and can think better than he or she could while agitated. The statement "Tell me what the problem is" will now elicit Adult information from the patient, demonstrating to him or her that problem solving involves thinking and that it is grandiose to believe that pacing up and down really changes anything or that escalation to violence will help.

If unable to stop the escalation of agitation into violence, the therapist and other members of the group provide safe physical controls until the storm has passed. After this the patient is able to express his or her needs more clearly and to work with others. The therapist does not discount the agitation. He or she proceeds through the following: 1) "You sound upset" (stimulus), 2) (implicit in statement 1) "That matters to me" (significance), 3) "That means you have a problem" (problem to be solved), and 4) "You can tell us what the problem is" (ability to solve problem).

Cathexis Reader develops the discount idea in detail, and this is very valuable. Disturbed patients and the people who work with them often discount what is happening, its solvability, and the capacity of patient or therapist to take effective action.

Because of space limitations, I will not discuss the many other useful ideas in this book. I have only one caveat: the subtitle is misleading. This book is only an introduction to, not a description of, the treatment of psychosis by transactional analysis. I hope that book will soon be written by Schiff and collaborators.

ROBERT C. DRYE, M.D.
Watsonville, Calif.

Community Mental Health Legislation: The Formative Process, *by Henry A. Foley. Lexington, Mass., Lexington Books (D.C. Heath and Co.), 1975, 148 pp., $14.00.*

Like the author of this book, I worked at NIMH; I watched many of the processes that he reports on in this book. He reconstructs a history in which I participated.

In the foreword Samuel Beer suggests,

> Dr. Foley shows how federal officials identified an important problem, promoted the research necessary for a solution, attracted a coalition united in its goals and successful in its lobbying, and, finally, administered the resulting program in a manner faithful to the letter and the spirit of the legislation, and to the intent of the office. In short, his unconventional thesis is that the federal government is capable of action that is rational, purposive, and non-incremental.

Reviewing this book and reviewing my own experience, I believe that the logic of this development was indeed present. One can see this beautiful straight line of rational processes retrospectively. As a psychiatrist deeply concerned with social change, however, I am not sure whether I can believe everything that is rationally presented.

In reading *The Double Helix* by James Watson (1), I was awed by the fact that the discovery of the DNA molecule was less a straight, rational process and more one that we might call human. In the development of community mental health legislation as well, the waves and crises, cycles, annoyances, angers, perceptions, and misperceptions were

part of the process. People floated in and out of the project. Indeed, as the size and scope of the program became larger and involved more money, it began to attract more and more people who, for a variety of reasons, played critical and important roles in modifying and affecting the policy implementation.

Perhaps my own view is skewed by the glasses I wear: it is my strong belief that mental health is an area of concern and responsibility of more people than those included in the mental health professions. Mental health should therefore be firmly implanted within the value systems of other programs—education, labor, the Department of Defense, the Children's Bureau, Social Security, and a host of others. What actually happened was that as the mobilization for community mental health developed, a set of pressures that would guarantee a potential lack of success was also mobilized.

It is my belief that the side effects of the legislation probably had a bigger impact than the direct activities of the community mental health center. I am not too sanguine about the output or results of the program. I *am* sanguine and excited about the fact that the spinoffs have led to a tremendous change in the way we view psychological problem areas. Indirectly, its failure led to the establishment of many new ways of approaching psychological problems. It also led, in some instances, to a reintegration of psychiatry and mental health with medicine itself.

What then do we have in this book? If one believes that the people who, as Samuel Beers says, developed a rational resolution to a problem were right, we have an illustration of how political power can be mobilized in such a way that the appearance of dealing with a mental health program is achieved. However, if one believes, as many within psychiatry and the other mental health professions do, that there are alternative ways to deal with some of the issues involved, we have here a relatively narrow-minded implementation of an idea of what the issues were in psychiatry and mental health.

I would like to say, personally, that before the outset of community mental health activities in high-budget form, NIMH served under Robert Felix as a leader in understanding issues that were truly concerns of psychiatry, human development, psychosomatics, and many of the behavioral sciences. Its activity spun off many ideas that were later implemented by a variety of programs throughout and outside government. One thing not documented by Foley is that the orientation of NIMH as facilitator, stimulant, guide, and leader was replaced by an orientation according to which, in my opinion, NIMH became a closed organization concerned with selling a particular kind of product, i.e., community mental health.

It is only more recently, as the budgets are being cut and the available resources are less plentiful, that questions are again being raised about the allocation of mental health funds.

I think Henry Foley should be complimented on a fine documentation. I agree with him that some of the other political science conceptual models concerning how programs develop and change are not clear pictures of the process. If, however, this were more than a report, if it carefully evaluated whether we have done something about the mental health of the population of the United States, I would say that we did so only indirectly, and that much of the energy that went into community mental health legislation did not lead to an outcome that truly changed the lives of the people who are mentally ill.

Sadly or fortunately, the real heroes are not the legislators or the policy makers, but the people who have dealt with people in trouble daily: psychiatrists, psychologists, aides, neighbors, bartenders, and all those caretakers of society—official and otherwise—who have expended their human social energy in helping to heal the mentally ill. There are vast numbers of these people who need to be recognized and acclaimed because it is they who in the last 25 years have done the important job.

REFERENCE

1. Watson JD: The Double Helix. New York, New American Library, 1969

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

Creativity: The Magic Synthesis, *by Silvano Arieti. New York, N.Y., Basic Books, 1976, 429 pp., $15.95.*

Aminergic Hypotheses of Behavior: Reality or Cliché? National Institute on Drug Abuse Research Monograph 3, *edited by Bruce Kenneth Bernard, Ph.D. Rockville, Md., NIDA, 1975, 148 pp., $6.75 (paper).*

Police Social Work, *by Edward M. Colbach, M.D., and Charles D. Fosterling, M.S.W., M.P.H. Springfield, Ill., Charles C Thomas, 1976, 155 pp., no price listed.*

Group Relations Reader, *edited by Arthur D. Colman and W. Harold Bexton. Sausalito, Calif, GREX (Minneapolis, Minn., A.K. Rice Institute, distributor), 1975, 370 pp., $10.50.*

ESP Party Games, *by Richard De A'Morelli. Chatsworth, Calif., Major Books, 1976, 160 pp., $1.25 (paper).*

Emotional Expression in Infancy: A Biobehavioral Study. Psychological Issues Monograph 37, *by Robert N. Emde, Theodore J. Gaensbauer, and Robert J. Harmon. New York, N.Y., International Universities Press, 1976, 192 pp., no price listed.*

Lying, Despair, Jealousy, Envy, Sex, Suicide, Drugs, and the Good Life, *by Leslie H. Farber. New York, N.Y., Basic Books, 1976, 232 pp., $10.00.*

Practical Psychology, *by James P. Flanders. New York, N.Y., Harper & Row, 1976, 299 pp., no price listed.*

The Deadly Innocents: Portraits of Children Who Kill, *by Muriel Gardiner. New York, N.Y., Basic Books, 1976, 190 pp., $8.95.*

Psychotherapy with Children of Divorce, *by Richard A. Gardner, M.D. New York, N.Y., Jason Aronson, 1976, 528 pp., $25.00.*

Psychopharmacological Agents, Vol. IV: Use, Misuse, and Abuse, *edited by Maxwell Gordon. New York, N.Y., Academic Press (Harcourt Brace Jovanovich), 1976, 182 pp., $22.00.*

Biological Foundations of Psychiatry, Vols. 1 and 2, *edited by Robert G. Grenell and Sabit Gabay. New York, N.Y., Raven Press, 1976, 1,013 pp., $70.00 ($35.00 per volume).*

The Book of the It, *by Georg Groddeck, M.D. New York, N.Y., International Universities Press, 1976, 346 pp., no price listed.*

Recertification: A Look at the Issues. Report 96, *by the Group for the Advancement of Psychiatry Task Force on Recertification. New York, N.Y., GAP, 1976, 55 pp., $2.50 (paper).*

Psychoanalysis: Observation, Theory, Application. Selected Papers of Robert Waelder, *edited by Samuel A. Guttman, M.D., Ph.D. New York, N.Y., International Universities Press, 1976, 689 pp., no price listed.*

Studies in Violence and Television, *by Melvin S. Heller, M.S., M.D., and Samuel Polsky, J.D., Ph.D. New York, N.Y., American Broadcasting Co., 1976, 503 pp., no price listed (spiral bound).*

Disability in Childhood and Youth, *by P. Henderson, M.D., D.P.H. New York, N.Y., Oxford University Press, 1974, 195 pp., $3.75 (paper).*

Health Manpower Information for Policy Guidance, *edited by Dale L. Hiestand and Miriam Ostow. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 138 pp., no price listed.*

Alternatives in Community Mental Health, *by Gordon P. Holleb and Walter H. Abrams. Boston, Mass., Beacon Press, 1975, 162 pp., $8.95.*

The Psychology of Death, concise ed., *by Robert Kastenbaum and Ruth Aisenberg. New York, N.Y., Springer Publishing Co., 1976, 434 pp., $9.95 (paper).*

The Mentally Retarded Citizen and the Law, *edited by Michael Kindred, Julius Cohen, David Penrod, and Thomas Shaffer; sponsored by the President's Committee on Mental Retardation. New York, N.Y., Free Press (Macmillan Publishing Co.), 1976, 692 pp., $18.95.*

Clinical Neuropharmacology, Vol. 1, *edited by Harold L. Klawans, M.D. New York, N.Y., Raven Press, 1976, 213 pp., $18.50.*

A Complete Guide to Therapy: From Psychoanalysis to Behavior Modification, *by Joel Kovel, M.D. New York, N.Y., Pantheon Books, 1976, 273 pp., $10.00.*

Community Survival for Long-Term Patients, *by H. Richard Lamb and associates. San Francisco, Calif., Jossey-Bass, 1976, 183 pp., $10.95.*

The Bipersonal Field, *by Robert Langs, M.D. New York, N.Y., Jason Aronson, 1976, 462 pp., $20.00.*

Approaches to Modifying Patient Behavior, *by Michael D. LeBow, Ph.D. New York, N.Y., Appleton-Century-Crofts (Prentice-Hall), 1976, 372 pp., no price listed.*

Handbook of Behavior Modification and Behavior Therapy, *edited by Harold Leitenberg. Englewood Cliffs, N.J., Prentice-Hall, 1976, 649 pp., no price listed.*

Drug Use and Abuse Among U.S. Minorities: An Annotated Bibliography, *by Patti Iiyama, Setsuko Matsunaga Nishi, and Bruce D. Johnson. New York, N.Y., Praeger Publishers, 1976, 247 pp., $15.00.*

Ego Development, *by Jane Loevinger, with the assistance of Augusto Blasi. San Francisco, Calif., Jossey-Bass, 1976, 482 pp., $17.50.*

Kindly Bent To Ease Us, Part Two: Meditation, *by Longchenpa; translated and annotated by Herbert V. Guenther. Emeryville, Calif., Dharma Publishing, 1976, 118 pp., $4.95 (paper).*

Getting To Know the Troubled Child, *by David H. Looff, M.D. Knoxville, Tenn., University of Tennessee Press, 1976, 241 pp., $5.95 (paper).*

Psychiatrie und Psychosomatik: Gedenkschrift für Prof. N. Petrilowitsch, *edited by J.J. López Ibor, R. Michaelis, and U. Spiegelberg. New York, N.Y., S. Karger, 1976, 191 pp., $34.00 (paper).*

Murder and Madness, *by Donald T. Lunde. San Francisco, Calif., San Francisco Book Co., 1976, 133 pp., $3.95 (paper).*

Psychological Assessment: A Conceptual Approach, *by Michael P. Maloney, Ph.D., and Michael P. Ward, Ph.D. New York, N.Y., Oxford University Press, 1976, 408 pp., $14.00.*

People and Predicaments, *by Milton Mazer. Cambridge, Mass., Harvard University Press, 1976, 275 pp., $12.50.*

The Psychiatric Hospital Today—A Quality Profile, *by John Mulhearn and Gayle Momeny. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 138 pp., no price listed.*

Multidimensional Functional Assessment: The OARS Methodology. A Manual, *edited by Eric Pfeiffer, M.D. Durham, N.C., Center for the Study of Aging and Human Development, 1975, 134 pp., $6.00 (paper).*

Heroin Addiction: Theory, Research, and Treatment, *by Jerome J. Platt and Christina Labate. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 398 pp., $19.95.*

Freud's "Project" Re-Assessed: Preface to Contemporary Cognitive Theory and Neuropsychology, *by Karl H. Pribram and Merton M. Gill. New York, N.Y., Basic Books, 1976, 181 pp., $10.00.*

Autism: Diagnosis, Current Research and Management, *edited by Edward R. Ritvo, M.D., Betty Jo Freeman, Ph.D., Edward M. Ornitz, M.D., and Peter E. Tanguay, M.D. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 298 pp., $16.95.*

Creative Art Therapy, *by Arthur Robbins, Ed.D., A.T.R., and Linda Beth Sibley, M.P.S., A.T.R. New York, N.Y., Brunner/Mazel, 1976, 261 pp., $15.00.*

Génétique et Comportements, *by Pierre Roubertoux and Michèle Carlier. Paris, France, Masson, 1976, 223 pp., 70 French francs (paper).*

Freedom To Die: Moral and Legal Aspects of Euthanasia, *by O. Ruth Russell. New York, N.Y., Laurel (Dell Publishing Co.), 1976, 316 pp., $1.95 (paper).*

Hormones, Behavior, and Psychopathology, *edited by Edward J. Sachar, M.D. New York, N.Y., Raven Press, 1976, 300 pp., $24.00.*

Parapsychology: Its Relation to Physics, Biology, Psychology, and Psychiatry, *edited by Gertrude R. Schmeidler. Metuchen, N.J., Scarecrow Press, 1976, 263 pp., $11.00.*

Understanding EEG: An Introduction to Electroencephalography, *by Donald Scott. Philadelphia, Pa., J.B. Lippincott Co., 1976, 241 pp., $16.00.*

Suicidology: Contemporary Developments, *edited by Edwin S. Shneidman, Ph.D. New York, N.Y., Grune & Stratton (Harcourt Brace Jovanovich), 1976, 546 pp., no price listed.*

Social Deviance, *by S. Giora Shoham. New York, N.Y., Gardner Press (Halsted Press, John Wiley & Sons, distributor), 1976, 160 pp., $13.95.*

Systems of Family and Marital Psychotherapy, *by A.C. Robin Skynner, M.D., D.P.M. New York, N.Y., Brunner/Mazel, 1976, 418 pp., $17.95.*

Psychoanalysis and Contemporary Science: An Annual of Integrative and Interdisciplinary Studies, Vol. IV, 1975, *edited by Donald P. Spence. New York, N.Y., International Universities Press, 1976, 567 pp., no price listed.*

Philosophical Dimensions of the Neuro-Medical Sciences, *edited by Stuart F. Spicker and H. Tristram Engelhardt, Jr. Lawrence, Mass., D. Reidel Publishing Co., 1976, 268 pp., $29.00.*

Treatment of the Narcissistic Neuroses, *by Hyman Spotnitz, M.D., Med.Sc.D., and Phyllis W. Meadow, Ph.D. New York, N.Y., Manhattan Center for Advanced Psychoanalytic Studies, 1976, 246 pp., $15.00.*

The Adventure of Sobriety, *by David A. Stewart. East Lansing, Mich., Michigan State University Press, 1976, 128 pp., $7.50.*

The Psychological World of Natsume Sōseki, *by Doi Takeo; translated by William Jefferson Tyler. Cambridge, Mass., Harvard University Press, 1976, 158 pp., $15.00.*

Acupuncture Therapy: Current Chinese Practice, 2nd ed., *by Leong T. Tan, Margaret Y.-C. Tan, and Ilza Veith. Philadelphia, Pa., Temple University Press, 1976, 250 pp., $17.50.*

Alcoholism: Interdisciplinary Approaches to an Enduring Problem, *edited by Ralph E. Tarter and A. Arthur Sugerman. Reading, Mass., Addison-Wesley Publishing Co. Advanced Book Program, 1976, 852 pp., $13.50 (paper).*

The Freudian Slip: Psychoanalysis and Textual Criticism, *by Sebastiano Timpanaro; translated by Kate Soper. Atlantic Highlands, N.J., Humanities Press, 1976, 225 pp., $13.50.*

Family Constellation: Its Effects on Personality and Social Behavior, 3rd ed., *by Walter Toman, Ph.D. New York, N.Y., Springer Publishing Co., 1976, 325 pp., $12.95.*

Differential Diagnosis and Treatment in Social Work, 2nd ed., *edited by Francis J. Turner. New York, N.Y., Free Press (Macmillan Publishing Co.), 1976, 758 pp., $15.95.*

The Role of Bodily Feelings in Anxiety. Maudsley Monograph 23, *by Peter Tyrer. New York, N.Y., Oxford University Press, 1976, 119 pp., $18.00.*

Environments as Therapy for Brain Dysfunction, *edited by Roger N. Walsh and William T. Greenough. New York, N.Y., Plenum Press, 1976, 369 pp., $29.50.*

Waking Dreams, *by Mary M. Watkins. New York, N.Y., Interface (Gordon and Breach), 1976, 168 pp., $17.50.*

The Neurosciences: Paths of Discovery, *edited by Frederic G. Worden, Judith P. Swazey, and George Adelman. Cambridge, Mass., MIT Press, 1975, 587 pp., $14.95 (paper).*

Mental Retardation and Developmental Disabilities: An Annual Review, VIII, *edited by Joseph Wortis, M.D. New York, N.Y., Brunner/Mazel, 1976, 332 pp., $17.50.*

Psychodrama: Resolving Emotional Problems Through Role-Playing, *by Lewis Yablonsky. New York, N.Y., Basic Books, 1976, 285 pp., $10.95.*

No default insurance

Tofranil-PM®
imipramine **pamoate**

Geigy

In depression

Daily Dosage Chart



1 h.s.

A major reason for drug defaulting is multiple daily dosage schedules.

Ayd* reports that 70 percent of patients default on a q.i.d. regimen; 60 percent on t.i.d.; 30 percent on b.i.d., and only 7 percent on a single daily dose.

A single daily capsule that provides a full day's medication would logically assure better therapeutic results.

Because one capsule lasts from bedtime to bedtime, Tofranil-**PM**® may markedly reduce the probability of missed doses.

After therapy is initiated with the 75-mg. capsule, the 150-mg. capsule is the dose level at which optimum response is usually obtained.

Please review the prescribing information summarized on the back of this page.

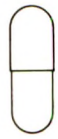
*Ayd, F.J., Jr. (Ed.): Int. Drug Ther. Newslett. 7(9/10):35-50 (Nov./Dec.) 1972.

Tofranil-PM®
imipramine **pamoate**

One capsule
lasts from bedtime
to bedtime.

Initial Dose

For Maintenance Therapy

Starting Dose	Usual Optimum Response Dose	A Full Range to Choose From*			
					
75 mg.	150 mg.	150 mg.	125 mg.	100 mg.	75 mg.

***Each capsule contains imipramine pamoate equivalent to 150, 125, 100 or 75 mg. imipramine hydrochloride.**

Tofranil-PM®
brand of imipramine pamoate

Indications: For the relief of symptoms of depression. Endogenous depression is more likely to be alleviated than other depressive states.

Contraindications: The concomitant use of monoamine oxidase inhibiting compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur in patients receiving such combinations. The potentiation of adverse effects can be serious, or even fatal. When it is desired to substitute Tofranil-PM, brand of imipramine pamoate, in patients receiving a monoamine oxidase inhibitor, as long an interval should elapse as the clinical situation will allow, with a minimum of 14 days. Initial dosage should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated during the acute recovery period after a myocardial infarction. Patients with a known hypersensitivity to this compound should not be given the drug. The possibility of cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

—patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;

—patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;

—hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;

—patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;

—patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Since imipramine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as operating an automobile or machinery, the patient should be cautioned accordingly.

Usage in Children: Tofranil-PM, brand of imipramine pamoate, should not be used in children of any age because of the increased potential for acute overdosage due to the high unit potency (75 mg., 100 mg., 125 mg. and 150 mg.). Each capsule contains imipramine pamoate equivalent to 75 mg., 100 mg., 125 mg. or 150 mg. imipramine hydrochloride.

Precautions: It should be kept in mind that the possibility of suicide in seriously depressed patients is inherent in the illness and may persist until significant remission occurs. Such patients should be carefully supervised during the early phase of treatment with Tofranil-PM, brand of imipramine pamoate, and may require hospitalization. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, Tofranil-PM, brand of imipramine pamoate, may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g., paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Avoid the use of preparations, such as decongestants and local anesthetics, which contain any sympathomimetic amine (e.g., adrenalin, noradrenalin), since it has been reported that tricyclic antidepressants can potentiate the effects of catecholamines.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential, since there is limited clinical experience.

Adverse Reactions: Note: Although the listing which follows includes a few adverse reactions which have not been reported with this specific drug, the pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when imipramine is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue); drug fever; cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: In adult outpatients, therapy should be initiated on a once-a-day basis with 75 mg./day. This may be increased to 150 mg./day which is the dose level which usually obtains optimum response. If necessary, dosage may be increased to 200 mg./day. Dosage should be modified as necessary by clinical response and any evidence of intolerance. Daily dosage may be given at bedtime, or in some patients in divided daily doses.

Hospitalized patients should be started on a once-a-day basis with 100-150 mg./day and may be increased to 200 mg./day. Dosage should be increased to 250-300 mg./day if there is no response after two weeks.

Following remission, maintenance medication may be required for a longer period of time at the lowest dose that will maintain remission. The usual adult maintenance dosage is 75-150 mg./day on a once-a-day basis, preferably at bedtime.

In adolescent and geriatric patients, capsules of Tofranil-PM, brand of imipramine pamoate, may be used when total daily dosage is established at 75 mg. or higher. It is generally unnecessary to exceed 100 mg./day in these patients. This dosage may be given once a day at bedtime or, if needed, in divided daily doses.

How Supplied: Tofranil-PM, brand of imipramine pamoate: Capsules of 75, 100, 125 and 150 mg. (Each capsule contains imipramine pamoate equivalent to 75, 100, 125 or 150 mg. of imipramine hydrochloride.)

(B) 98-146-840-A(9/75) 667120

For complete details, including dosage and administration, please refer to the full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

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First Time Available at

The Institute on Hospital & Community Psychiatry

Marriott Hotel Atlanta, Georgia September 20-23

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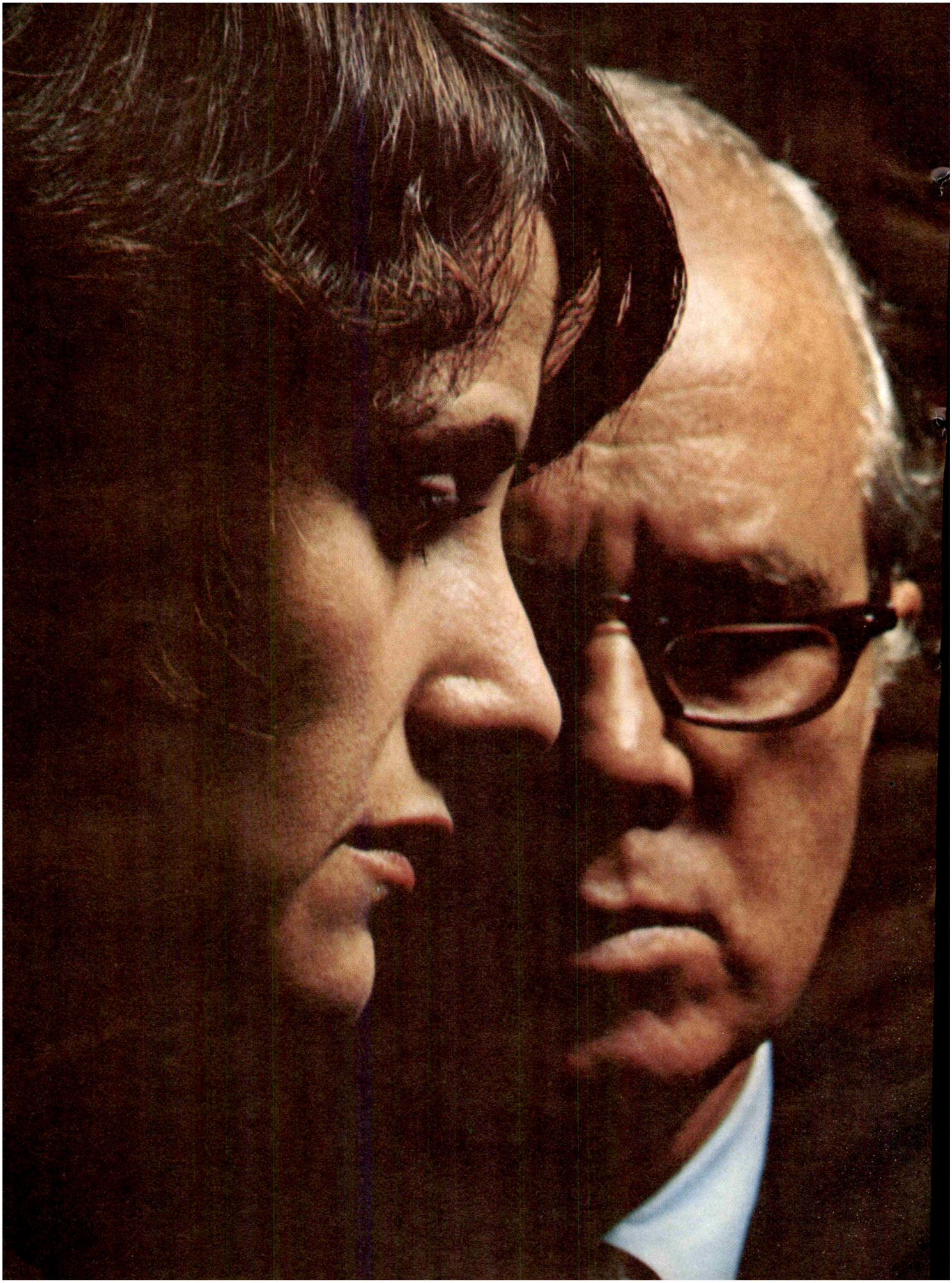
For Employers and Position Applicants

Those wishing to announce either position openings or their availability for employment may register in advance by requesting a listing form by calling Ms. M. J. Merrick (202) 232-7878, Ext. 327, or writing to her attention at APA Central Office, Membership Services Division, 1700 18th St., N.W. Washington, D.C. 20009. Forms should be returned no later than September 15th. On-site listings will also be accepted. However, listings received at the APA prior to September 15th will be available from the very beginning of the Institute. There will be a placement booth and an interviewing area located in the Institute registration area at the Marriott Hotel. Listings will be accepted for any mental health related position vacancy/position availability.

Applicants – $3 for listing availability.

Employers – $5 for listing job description.

Complete sets of all applicant and position listings will be available at the close of the meeting at $10 per set.



The TRIAVIL® Potential in the management of moderate to severe anxiety with depression

When time and talk are not enough...
The therapist is the primary catalyst for change in the psychotherapeutic relationship. However, when patients suffer from moderate to severe anxiety with depression, there are situations when TRIAVIL can often be a useful adjunct.

...TRIAVIL may help
There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

Tablets TRIAVIL are available in four different combinations affording flexibility and individualized dosage adjustment. Since it is simpler to remember to take one tablet rather than several (particularly in multiple daily doses), your patients on TRIAVIL will be more likely to take proper doses of the medication.

TRIAVIL is contraindicated in CNS depression from drugs; in the presence of evidence of bone marrow depression; and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to other drugs or mask other disorders. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please turn to the following page.

when patients exhibit moderate to marked anxiety or agitation with symptoms of depression

TRIAVIL® **containing perphenazine and amitriptyline HCl**

a tranquilizer-antidepressant

for highly effective relief of depression with moderate anxiety

TRIAVIL®

containing perphenazine and amitriptyline HCl

a tranquilizer-antidepressant

Available:

TRIAVIL® 2-25: Each tablet contains 2 mg perphenazine and 25 mg amitriptyline HCl

TRIAVIL® 2-10: Each tablet contains 2 mg perphenazine and 10 mg amitriptyline HCl

TRIAVIL® 4-25: Each tablet contains 4 mg perphenazine and 25 mg amitriptyline HCl

TRIAVIL® 4-10: Each tablet contains 4 mg perphenazine and 10 mg amitriptyline HCl

INITIAL THERAPY FOR MANY PATIENTS
TRIAVIL® 2-25 (or TRIAVIL® 4-25) t.i.d. or q.i.d.

FOR FLEXIBILITY IN ADJUSTING MAINTENANCE THERAPY
TRIAVIL® 2-10 (or TRIAVIL® 4-10)

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

For more detailed information, consult your MSD Representative or see full Prescribing Information
Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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Coverage and Utilization of Care for Mental Conditions Under Health Insurance —Various Studies, 1973–74

By Louis S. Reed, Ph.D.
Consultant in Health Economics, American Psychiatric Association

This book reports six studies that add to the growing body of data demonstrating the feasibility of covering mental illness under health insurance. Although in some ways it may be considered a supplement to APA's 1972 book **HEALTH INSURANCE AND PSYCHIATRIC CARE: UTILIZATION AND COST** (Reed, Myers, and Scheidemandel), all of the data are new. The studies cover the following areas:

- Utilization of mental benefits under the Blue Cross and Blue Shield plan for federal employees, documenting that a "plateau" in the use of these benefits was reached in 1973–74.
- Comparison of benefits for mental and other illnesses under selected employee health benefit plans.
- Coverage of mental illness under collective bargaining agreements of selected unions.
- Utilization of care for mental conditions under the Canadian health insurance program, which gives the same coverage for mental as for other conditions.
- Updating of information on Blue Cross benefits for hospital care of mental illness.
- Data from selected Blue Cross and Blue Shield plans on coverage and utilization of mental conditions, with emphasis on major medical coverage.

80pp. Paperbound

Single copy, $4.00; 10–49 copies; $3.80 each; 50 or more copies, $3.20 each.

SPECIAL OFFER: One copy of this book (regular price, $4.00) and one copy of **HEALTH INSURANCE AND PSYCHIATRIC CARE: UTILIZATION AND COST** (regular price, $6.50) for $8.50.

Publications Services Division
American Psychiatric Association
1700 18th St., N.W., Washington, D.C. 20009

Please send me _____ copies of **COVERAGE AND UTILIZATION OF CARE FOR MENTAL CONDITIONS UNDER HEALTH INSURANCE—VARIOUS STUDIES, 1973–74**. Single copy, $4.00; 10–49 copies, $3.80 each; 50 or more copies, $3.20 each.

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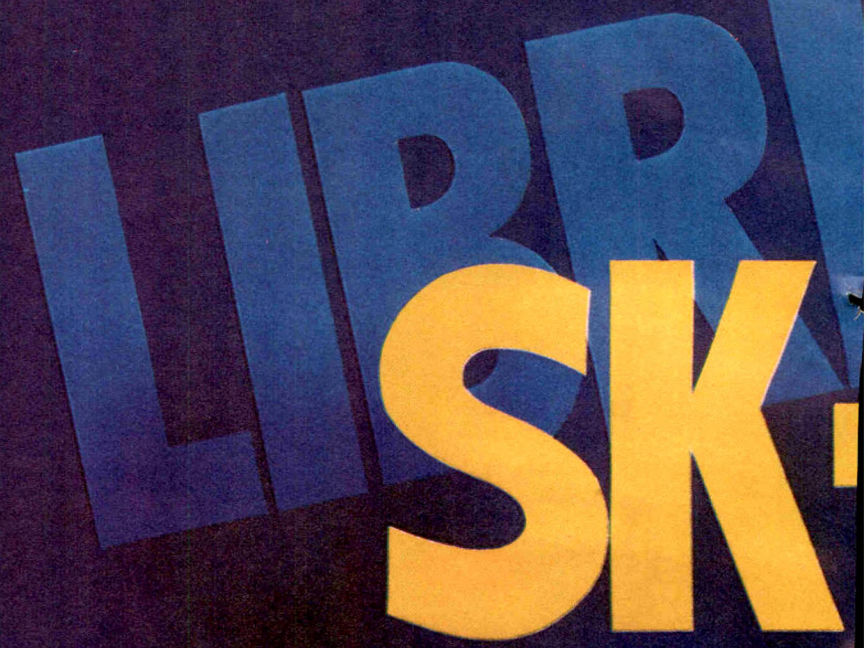
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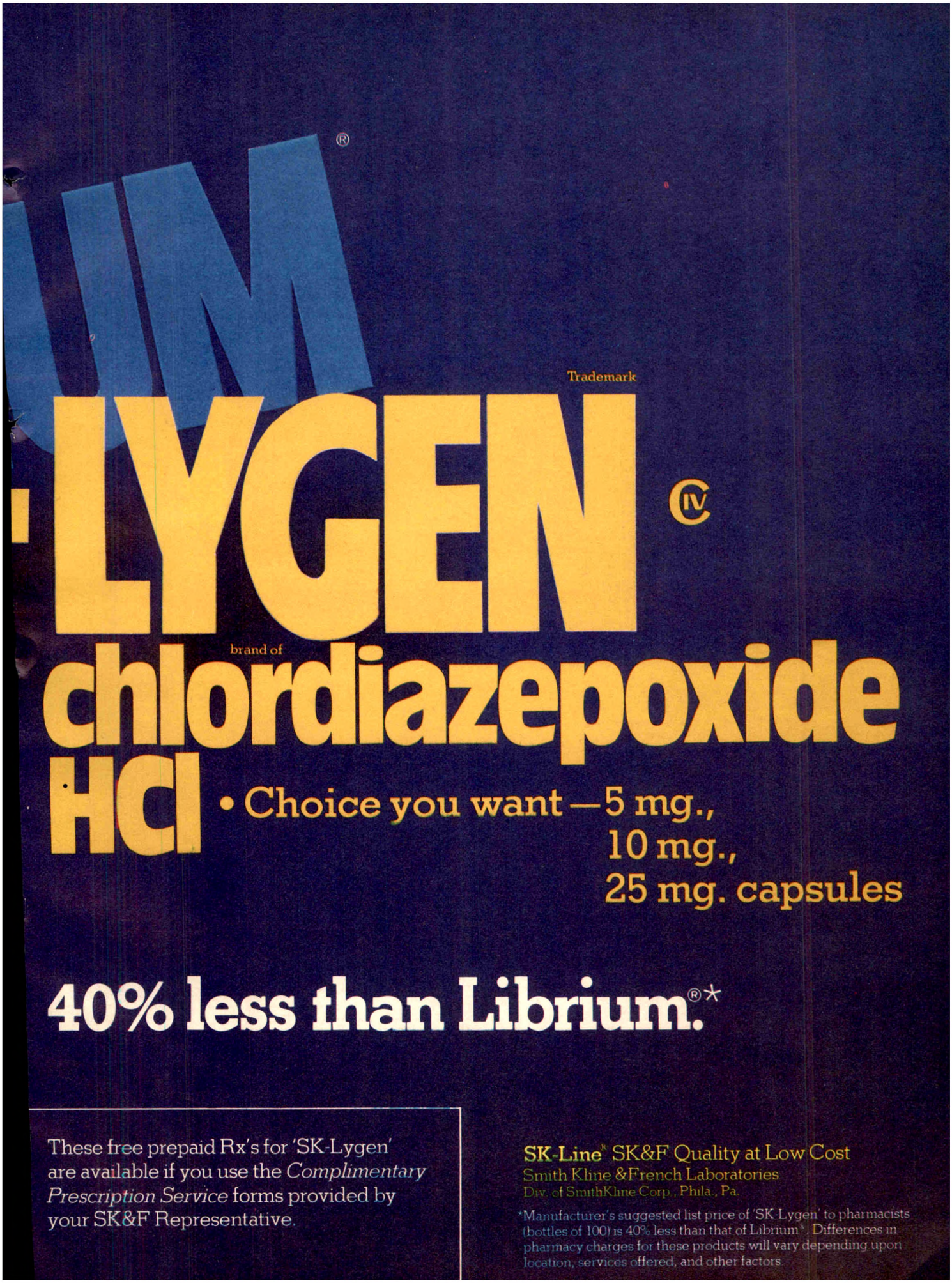
Chlordiazepoxide HCl now has another brand name.



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Your Patient's First 'SK-Lygen' Rx Is Free

Your patients can have their first 'SK-Lygen' prescriptions filled at their regular pharmacies without charge.


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*Manufacturer's suggested list price of 'SK-Lygen' to pharmacists (bottles of 100) is 40% less than that of Librium®. Differences in pharmacy charges for these products will vary depending upon location, services offered, and other factors.



If you think adjunctive antianxiety therapy is indicated...

Consider Serax® (oxazepam). It has been proved useful when anxiety and tension aren't responsive to simple reassurance and counsel.

Serax has been found valuable, particularly in the older patient, in the management and control of clinically significant anxiety, tension, agitation and irritability. It may also be useful where anxiety accompanies an underlying organic disorder.

Of special importance to elderly patients, Serax may be taken generally without fear of serious side effects.* Its dosage flexibility† generally permits adjustment to individual patient needs, making Serax a convenient adjunct to your therapy in the older patient.

Special care must, of course, be taken in prescribing antianxiety agents for elderly patients, especially where cardiac complications might ensue from a drop in blood pressure. And careful attention must be paid to dosage recommendations and follow-up observation.

*See following important information.
†See package circular for full prescribing information.

In Brief:

Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease. Anxiety associated with depression is also responsive to oxazepam therapy. This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients. Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: Use in Pregnancy: Safety for use in pregnancy not established.

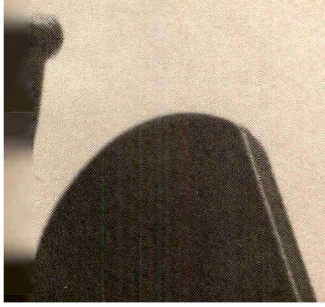
Precautions: Hypotensive reactions are rare, but use with caution where cardiac complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Not indicated in children under 6 years; absolute dosage for 6- to 12-year olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

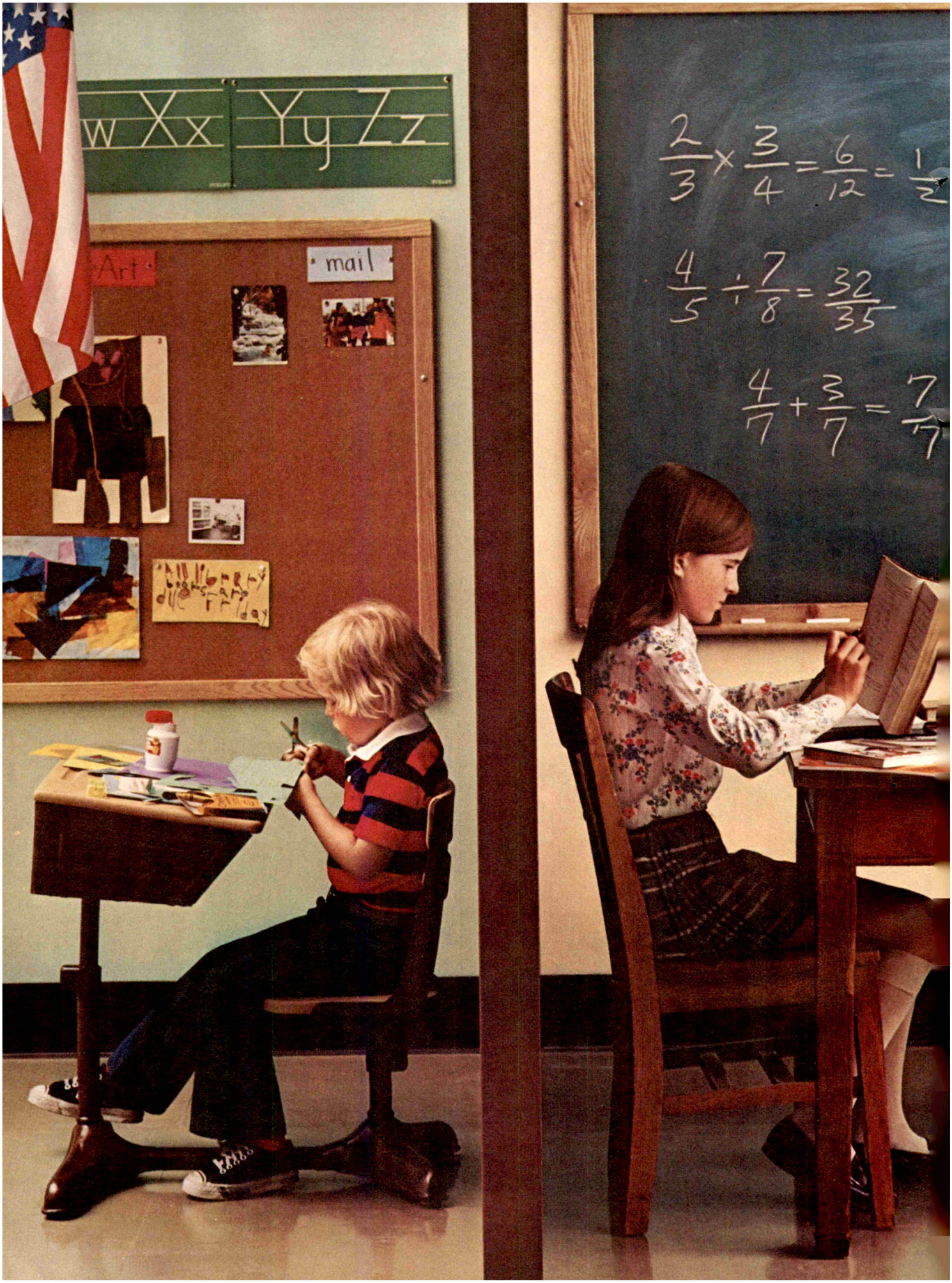
Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

In clinically significant anxiety

Serax®
(oxazepam)



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w Xx Yy Zz
Art
mail
$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12} = \frac{1}{2}$
$\frac{4}{5} \div \frac{7}{8} = \frac{32}{35}$
$\frac{4}{7} + \frac{3}{7} = \frac{7}{7}$

The vulnerable ages

The first epileptic seizure is most likely to occur during early childhood and at the onset of puberty

About 9 out of 10 epileptics experience their first seizure before the age of 20—with the highest incidence between 5 and 7, when children start school, and at the onset of puberty, a time of physiological and psychic turmoil.[1] The most common type, grand mal, occurs in approximately 75% of epileptic children,[1] and more than 50% of patients who suffer initially from petit mal develop grand mal seizures before they reach the age of 16.[2]

Mysoline (primidone) for control of grand mal, psychomotor and focal epilepsy

At the onset and afterwards — used alone or as concomitant therapy, MYSOLINE may reduce the frequency and severity of major motor seizures—or even eliminate them. *Excellent* for control of grand mal. Valuable for control of psychomotor[1,3,4] and focal epilepsy as well.[5]

Add Mysoline when control with other anticonvulsants is inadequate — As concomitant therapy, MYSOLINE can improve seizure control in grand mal and psychomotor epilepsy. The combined use of phenobarbital, diphenylhydantoin, and MYSOLINE may have additive anticonvulsant effects without additive side effects.[6]

Change to Mysoline when other anticonvulsants fail — A changeover to MYSOLINE is frequently warranted when other anticonvulsants must be discontinued because of important side effects, or when grand mal seizures are refractory to phenobarbital, with or without diphenylhydantoin.[7]

Ayerst®

Mysoline® (primidone)

Tablets 250 mg.
50 mg.
Suspension 250 mg./5 cc.

May be the start of a better life for the epileptic

See following page of advertisement for prescribing information.

7538

Mysoline® (primidone)

may be the start of a better life for the epileptic

initial and maintenance therapy for
grand mal, psychomotor and focal epilepsy

BRIEF SUMMARY
(For full prescribing information, see package circular.)

MYSOLINE® Brand of PRIMIDONE

Anticonvulsant

ACTIONS: MYSOLINE acts on the central nervous system to raise seizure threshold or alter seizure pattern. The mechanism(s) of action of anticonvulsant drugs is not known.

Primidone has anticonvulsant activity *per se*. In addition, its two metabolites possess anticonvulsant qualities. The major metabolite is phenylethylmalonamide (PEMA); the other is phenobarbital. In addition to its own anticonvulsant potential, PEMA potentiates phenobarbital.

INDICATIONS: MYSOLINE, either alone or used concomitantly with other anticonvulsants, is indicated in the control of grand mal, psychomotor, and focal epileptic seizures. It may control grand mal seizures refractory to other anticonvulsant therapy.

CONTRAINDICATIONS: Primidone is contraindicated in: 1) patients with porphyria and 2) patients who are hypersensitive to phenobarbital (see ACTIONS).

WARNINGS: The abrupt withdrawal of antiepileptic medication may precipitate status epilepticus.

The therapeutic efficacy of a dosage regimen takes several days before it can be assessed.

Use in pregnancy: Recent reports strongly suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Reference has been made to primidone in several cases in which it was used *in combination* with other anticonvulsants; but its teratogenicity has not been conclusively demonstrated. The possibility exists that other factors, *e.g.*, genetic factors or the epileptic condition, may contribute to the higher incidence of birth defects. The data also indicate that the great majority of mothers receiving anticonvulsant medication deliver normal infants.

Anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent major seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and risk to both mother and the unborn child.

When the nature, frequency, and severity of the seizures do not pose a clear threat to the patient, good medical practice requires that the physician weigh the expected therapeutic benefit of anticonvulsant therapy against possible risk on an individual basis.

Neonatal hemorrhage, with a coagulation defect resembling vitamin K deficiency, has been described in newborns whose mothers were taking primidone and other anticonvulsants. Pregnant women under anticonvulsant therapy should receive prophylactic vitamin K_1 therapy for one month prior to, and during, delivery.

The physician should weigh all of the foregoing considerations when treating and counseling epileptic women of childbearing potential.

PRECAUTIONS: The total daily dosage should not exceed 2 Gm. Since MYSOLINE therapy generally extends over prolonged periods, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

In nursing mothers: There is evidence that in mothers treated with primidone, the drug appears in the milk in substantial quantities. Since tests for the presence of primidone in biological fluids are too complex to be carried out in the average clinical laboratory, it is suggested that the presence of undue somnolence and drowsiness in nursing newborns of MYSOLINE-treated mothers be taken as an indication that nursing should be discontinued.

ADVERSE REACTIONS: The most frequently occurring early side effects are ataxia and vertigo. These tend to disappear with continued therapy, or with reduction of initial dosage. Occasionally, the following have been reported: nausea, anorexia, vomiting, fatigue, hyperirritability, emotional disturbances, sexual impotency, diplopia, nystagmus, drowsiness, and morbilliform skin eruptions. Occasionally, persistent or severe side effects may necessitate withdrawal of the drug. Megaloblastic anemia may occur as a rare idiosyncrasy to MYSOLINE and to other anticonvulsants. The anemia responds to folic acid, 15 mg. daily, without necessity of discontinuing medication.

DOSAGE AND ADMINISTRATION: The average adult dose is 0.75 to 1.5 Gm. per day. The initial dose is 250 mg. Increments of 250 mg. are added, usually at weekly intervals, to tolerance, or therapeutic effectiveness, up to daily doses not exceeding 2.0 Gm. A typical dosage schedule for the introduction of MYSOLINE (primidone) is as follows:

Adults and Children Over 8 Years of Age

1st Week 250 mg. daily at bedtime	*2nd Week* 250 mg. b.i.d.
3rd Week 250 mg. t.i.d.	*4th Week* 250 mg. q.i.d.

In children under 8 years of age, maintenance levels are established by a similar schedule, but at one-half the adult dosage. It is best to begin with 125 mg., with gradual weekly increases of 125 mg. a day, to a daily total usually between 500 mg. and 750 mg.

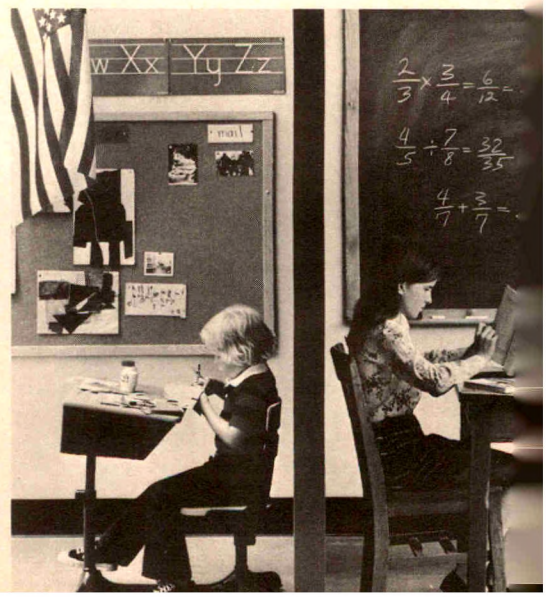
In patients already receiving other anticonvulsants: MYSOLINE should be gradually increased as dosage of the other drug(s) is maintained or gradually decreased. This regimen should be continued until satisfactory dosage level is achieved for combination, or the other medication is completely withdrawn. When therapy with this product alone is the objective, the transition should not be completed in less than two weeks.

MYSOLINE 50 mg. Tablet can be used to practical advantage when small fractional adjustments (upward or downward) may be required, as in the following circumstances:

- for initiation of combination therapy
- during "transfer" therapy
- for added protection in periods of stress or stressful situations that are likely to precipitate seizures (menstruation, allergic episodes, holidays, etc.)

HOW SUPPLIED: MYSOLINE *Tablets*—No. 430—Each tablet contains 250 mg. of primidone (scored), in bottles of 100 and 1,000. Also in unit dose package of 100. No. 431—Each tablet contains 50 mg. of primidone (scored), in bottles of 100 and 500. MYSOLINE *Suspension*—No. 3850—Each 5 cc. (teaspoonful) contains 250 mg. of primidone, in bottles of 8 fluid-ounces.

References: 1. Livingston, S.: Comprehensive Management of Epilepsy in Infancy, Childhood and Adolescence, Springfield, Ill., Charles C Thomas, 1972, pp. 6, 7, 584. 2. Grossman, H.J.: Ill. Med. J. *135*:260 (Mar.) 1969. 3. Scholl, M.L., in Conn, H.F.: Current Therapy 1973, Philadelphia, Saunders, 1973, pp. 675-7. 4. Metrick, S.: C.M.D. *37*:49 (Jan.) 1970. 5. Forster, F.M.: Med. Clin. North Am. *47*:1579 (Nov.) 1970. 6. White, P.T.: Wis. Med. J. *68*:178 (Apr.) 1969. 7. Millichap, J.G.: Drug Ther. *1*:15 (Oct.) 1971.

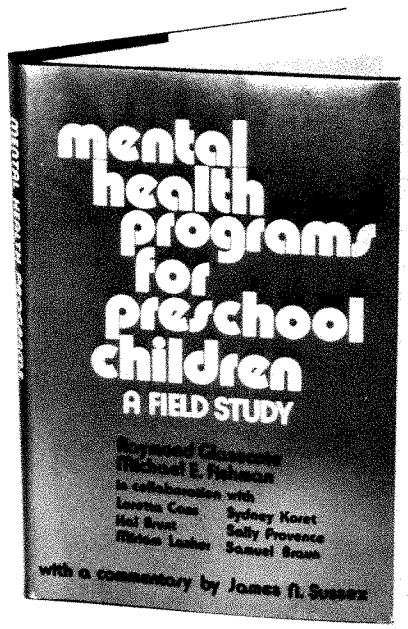


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New York, N.Y. 10017

A Timely New Book from The Joint Information Service

This latest Joint Information Service field study provides a concise, comprehensive overview of the complex matter of the very young American child and his mental health, and then describes in intimate detail seven unique programs for pre-school children with problems—from North Hollywood's Dubnoff Center, emphasizing education as its primary therapeutic modality, to Baltimore's Martin Luther King, Jr. Parent-Child Center, serving two housing projects, served by Johns Hopkins, and largely governed by its own people. All different in treatment approach and philosophy, the programs described are uniform in their dedication to innovation in improving service to the emotionally disturbed very young child, and, equally, to the emotional well being of all young children.

This thoughtful and perceptive description of what has been created by some of the best informed, most experienced and thoughtful specialists in mental health services for very young children should be welcome to all involved in the mental health of children and a casebook for those dealing with child and family mental health.



An articulate exposition of the immense problems and encouraging accomplishments in a particularly difficult area of endeavor . . . . Beyond their concern with the manifestly ill child, the authors intriguingly explore what may be needed to enhance the mental good health of all young children . . . . A significant contribution.

James N. Sussex, M.D.
President, American Association of Psychiatric Services for Children

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American Psychiatric Association
1700 18th St., N.W.,
Washington, D.C. 20009

976AJP

Put depression to rest

The h.s. schedule: provides symptomatic relief throughout the next day.

Because of its pharmacokinetic characteristics, Endep (amitriptyline HCl) Roche, provides the same clinical effect over a period of time when given as a single daily *h.s.* dose or as 1/3 the same dose given *t.i.d.*



Midnight

The h.s. schedule: helps put side effects in their place.

100 mg Endep *h.s.* can provide relief of depression-induced insomnia. Once asleep, the patients are also less likely to notice anticholinergic side effects—such as dry mouth—which reach a peak hours after the *h.s.* dose.

Because the sedative effect may impair patients' performance during daytime, warn patients not to drive or operate dangerous machinery until the sedative potential has been clearly established.

The h.s. schedule: helps maximize patient compliance.

According to one investigation, only 40% of patients comply with a *t.i.d* drug schedule whereas 93% of patients comply with a one-dose-a-day schedule.[1] An *h.s.* schedule of Endep (amitriptyline HCl), therefore, should help you maximize patient compliance which, in turn, helps ensure prompt recovery.

ROCHE

all day long

The 100-mg strength: early signs of progress.

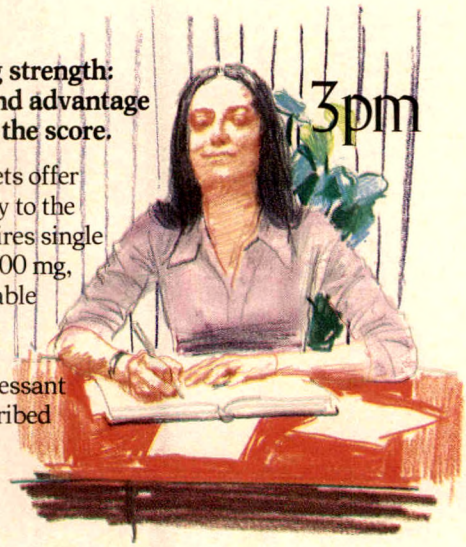
Many depressed patients with insomnia and anorexia begin to show improvement during the first week of Endep (amitriptyline HCl) therapy. Patients with symptoms of "neurotic" depression usually improve during the first week, whereas those with "psychotic" depression usually do not improve until the third week of therapy. However, adequate response may require up to 30 days in both types.



8am



Noon



3pm

The 100-mg strength: the economy and advantage of knowing the score.

100-mg tablets offer potential economy to the patient who requires single doses of 50 mg, 100 mg, or 150 mg. Available as scored tablets, Endep is the only tricyclic antidepressant that can be prescribed in half doses.

The 100-mg strength: emphasis on individualization of dosage.

The introduction of the 100-mg scored tablet brings to 5 the number of Endep dosage strengths now available as scored tablets: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg.



7pm

1. Ayd FJ, Jr. (Ed): *Int Drug Ther Newslett 7:* 35-50, Sept 10, 1972

2. Haskell DS, *et al:* Rapidity of Symptom Reduction in Depressions Treated with Amitriptyline. *J Nerv Ment Dis 160:* 24-33, 1975

with new 100mg Endep®



amitriptyline HCl/Roche

Before prescribing, please consult complete product information, a summary of which appears on the following page.

Endep®
amitriptyline HCl/Roche



10 mg | 25 mg | 50 mg | 75 mg | Just released 100 mg

The only tricyclic antidepressant with scored tablets

- By relieving underlying depression Endep (amitriptyline HCl), in responsive patients, lifts mood and relieves symptoms such as anorexia, loss of interest, inability to concentrate, decreased libido or GI disturbances, often within three or four weeks after starting therapy.
- Endep usually relieves accompanying sleep disturbances, particularly early in the treatment regimen.
- All five dosage strengths are scored for greater flexibility and convenience in titration.
- The *h.s.* dosage minimizes skipped doses, maximizes patient acceptance and compliance.
- Specifying Endep assures quality plus potential economy.

Important Considerations

'Should not be given concomitantly with an MAO inhibitor or within 2 weeks of its administration.

Patients should use caution in the performance of hazardous tasks such as operating machinery or driving a motor vehicle.

May enhance the effects of alcohol, barbiturates and other CNS depressants.

Not recommended for use during the acute recovery phase following myocardial infarction.

Patients with suicidal tendencies should not have easy access to large quantities of the drug.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: To relieve symptoms of depression (notably endogenous depressions) and depression accompanied by anxiety.

Contraindications: Known hypersensitivity. Do not use with monoamine oxidase (MAO) inhibitors or within at least 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Use not recommended during acute recovery phase after myocardial infarction.

Warnings: May block action of guanethidine or similar antihypertensives. Use with caution in patients with history of seizures, urinary retention, angle closure glaucoma, increased intraocular pressure. Closely supervise cardiovascular patients, hyperthyroid patients and those receiving thyroid medications. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, including amitriptyline HCl, especially in high doses. Myocardial infarction and stroke reported with use of this class of drugs.) May impair alertness; warn against hazardous occupations or driving a motor vehicle during therapy. Weigh possible benefits against hazards during pregnancy, the nursing period and in women of childbearing potential. Not recommended in children under 12.

Precautions: May exaggerate symptoms in schizophrenic and paranoid patients, or shift manic-depressives to manic stage; reduce dose or administer major tranquilizer concomitantly. Close supervision and careful dose adjustments required when given with anticholinergic or sympathomimetic agents. Exercise care in patients receiving large doses of ethchlorvynol; transient delirium reported with concomitant administration. May enhance effects of alcohol, barbiturates and other CNS depressants. Because of the possibility of suicide in depressed patients, do not permit easy access to large drug quantities in these patients. Because it may increase hazards of electroshock therapy, limit concomitant use to essential treatment. If possible, discontinue drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: Note: This list includes a few adverse reactions not reported with this specific drug but requiring consideration because of similarities of tricyclic antidepressants. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache and malaise. These are not indicative of addiction.

Dosage: Initiate at low levels; increase gradually, watching for signs of intolerance. As long as 30 days may elapse before adequate antidepressant effect develops; sedative effect may be noted earlier.

Initial Adult Dosage: Outpatients—25 mg *t.i.d.*; may be increased to 150 mg/day. Add increased drug to afternoon and/or bedtime doses. Alternate—50 to 100 mg *h.s.*, gradually increasing *h.s.* dose up to 150 mg/day. Hospitalized Patients—Up to 100 mg/day; increase gradually to 200 mg if necessary. A few patients may require 300 mg/day.

Adolescent and Elderly Patients: In general, 10 mg *t.i.d.* with 20 mg *h.s.* may be satisfactory for those who do not tolerate higher doses.

Maintenance Dosage: With symptomatic improvement, reduce dosage to lowest amount that gives relief, usually 25 mg *b.i.d.* to *q.i.d.*, or 10 mg *q.i.d.* Continue maintenance therapy 3 months or longer to avoid relapse.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestations and treatment.

Supplied: 10-mg, 25-mg, 50-mg, 75-mg and 100-mg scored tablets—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 60 (10 mg, 25 mg and 50 mg) or 30 (75 mg and 100 mg), available singly and in trays of 10.

ROCHE

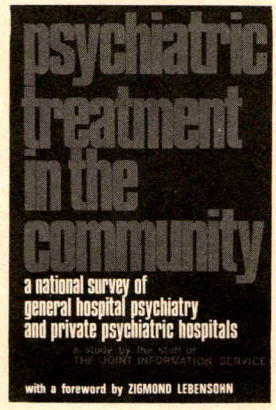
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Where The Action Is—

For more than a decade the general hospital psychiatric unit has been the principal locus of inpatient treatment. This latest Joint Information Service national survey brings up to date its earlier—and the original—study of this important component of the psychiatric scene. It reveals that the remarkable rate of growth held up, showing an increase of 50 percent in the number of units between 1963 and 1971, and an increase of 46 percent in the number of admissions. And it verifies that general hospital psychiatry has become increasingly comprehensive, with an impressively high level of outpatient service, emergency service, and even consultation to community agencies. Indeed, the general hospital accounts for several times as much service and activity as the widely heralded federally supported community mental health center.

This study also involves the private psychiatric hospitals, which have not changed much in number but are admitting about 10,000 more patients than in 1964—and they, too, are providing a remarkably comprehensive program.

It's your responsibility to be well-informed about these extraordinarily significant and vital pieces of American psychiatric service. You can do so by sending the order form below.



Please send me _____ copies of Psychiatric Treatment in the Community. (Single copy, $3.50. Four or more copies, $2.75 each)

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Basic tools of primitive psychiatry



Mankpo: Sceptres or staffs used by the Heviosso (lightning God) cult in medical ceremonies among the Ewe of Tongo and Fon of Dahomey. *Right,* staff with leopard's head, bared teeth and tongue (Ewe, Togo). *Left,* staff with ram's head—the sacred animal of the Heviosso—in the form of a serpent symbolizing the fire-spitting rainbow God of healing (Fon, Dahomey). From the collection of the Segy Gallery, New York City.

Basic tool of Western psychiatry

Thorazine®
(chlorpromazine, SK&F)

Tablets: 25 and 50 mg of the HCl

- 'Thorazine' controls psychotic symptoms
- Especially useful in agitated, violent or anxious schizophrenic patients
- Unsurpassed clinical experience
- 18 convenient dosage forms and strengths

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of manifestations of psychotic disorders. For control of the manifestations of manic-depressive illness (manic phase).

Probably effective: For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasia, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery) especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudo-parkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema.

NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 10 mg., 25 mg., 50 mg., 100 mg. and 200 mg., in bottles of 100; in Single Unit Packages of 100 (intended for institutional use only). Spansule® capsules, 30 mg., 75 mg., 150 mg., 200 mg. and 300 mg., in bottles of 50; in Single Unit Packages of 100 (intended for institutional use only). Injection, 25 mg./ml.; Syrup, 10 mg./5 ml.; Suppositories, 25 mg. and 100 mg.; Concentrate (intended for institutional use only), 30 mg./ml. and 100 mg./ml.

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SK&F

Smith Kline & French Laboratories
Division of SmithKline Corporation
Philadelphia, Pa.

For effective management of schizophrenic symptoms.

The schools don't like to get involved with medication for MBD – and now they don't have to



Importance of Cylert (pemoline) single daily dosage to the child, the parents and the teacher

For the child		For the adults
No drug in child's possession while at school	⟷	Control of medication remains with parents
Avoids situation in which child is repeatedly singled out as being "different"	⟷	Obviates need for teacher or nurse to supervise taking of mid-day doses
Helps prevent possible variations in effect caused by missed, forgotten or delayed doses	⟷	Helps assure that the prescribed dosage is being given each day

Cylert offers these benefits in a treatment program for MBD

- Single daily dose administration
- Minimal cardiovascular effects
- Mean dosage in long-term studies remained remarkably constant
- Can be taken with breakfast

Cylert® (pemoline) CIV

dosage is once-a-day, given to the child at home by the parent



Cylert, alone among CNS stimulants used to treat MBD, is inherently long-acting, permitting once-daily dosage

Dosage and administration

Cylert is given as a single oral dose each morning.

The recommended starting dose is 37.5 mg. per day. This daily dosage should be gradually increased at one-week intervals using increments of 18.75 mg. until the desired clinical response is obtained.

The mean daily effective dose ranges from 56.25 to 75 mg. per day. The maximum recommended daily dose of Cylert is 112.5 mg.

Using the recommended schedule of dose titration, significant benefits may not be seen until the third or fourth week of drug therapy. Side effects may be seen prior to optimum clinical results.

When not to use Cylert

Cylert should not be used for (and will not be effective in) simple cases of overactivity in school age children.

Neither should it be used in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis.

The physician should rely on a complete history of the child and a thorough description of symptoms from both parents and teacher before postulating a diagnosis of MBD.

Please see next page for Prescribing Information

60831-44

Cylert®
(pemoline) CIV

Prescribing Information

Description: Cylert (pemoline) is a white, tasteless, odorless powder which is relatively insoluble (less than 1 mg/ml) in water, chloroform, ether, acetone, and benzene. In 95% ethyl alcohol, the solubility of pemoline is 2.2 mg/ml.

Actions: Cylert (pemoline) is a central nervous system stimulant. The pharmacologic activity of pemoline is similar to that of other known stimulants but with minimal sympathomimetic effects. Pemoline is structurally dissimilar from the amphetamines and methylphenidate. Although the exact mode of pharmacodynamic action is undetermined in man, pemoline has been reported to increase the rate of synthesis of dopamine in rat brain.

In human subjects, Cylert produces peak blood levels within 2-4 hours. The serum half-life is approximately 12 hours. Multiple dose studies in adults at several dose levels indicate that serum levels plateau in approximately three days. Cylert and its metabolites are primarily excreted by the kidneys with approximately 75% of an oral dose appearing in the urine within a 24-hour period. Approximately 43% of pemoline is excreted unchanged. Metabolites include pemoline dione, conjugated pemoline and mandelic acid.

Cylert (pemoline) has a gradual onset of action in children with minimal brain dysfunction. Using the recommended schedule of dosage titration, significant clinical benefit may not be evident until the third or fourth week of drug administration.

Indications: MINIMAL BRAIN DYSFUNCTION IN CHILDREN—as adjunctive therapy to other remedial measures (psychological, educational, social).

Special Diagnostic Considerations: Specific etiology of minimal brain dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis includes the use not only of medical but of psychological, educational, and social resources.

Characteristics commonly reported include: A chronic history of moderate to severe hyperactivity, short attention span, distractibility, emotional lability, and impulsivity. Nonlocalizing (soft) neurological signs, learning disability, and abnormal EEG may or may not be present. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. In the primary therapy of MBD, appropriate educational placement is essential and psychosocial intervention is generally necessary. When these measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis.

Contraindication: Cylert (pemoline) is contraindicated in patients with known hypersensitivity or idiosyncrasy to the drug. (See PRECAUTIONS)

Warnings: Cylert is not recommended for children under six years of age since safety and efficacy in this age group have not yet been established.

Since Cylert (pemoline) and its metabolites are excreted primarily by the kidneys, caution should be observed in administering the drug to children with significantly impaired renal function.

Sufficient data on safety and efficacy of Cylert administration for periods beyond two years duration in children with minimal brain dysfunction are not yet available. Although a definite causal relationship has not been established, some temporary suppression of predicted growth pattern(i.e., weight and/or height) has been reported with the long-term use of stimulants in children. Therefore, patients requiring long-term therapy should be carefully monitored.

Drug Interactions: Interactions between Cylert and other drugs have not been studied in humans. As with most other drugs, concurrent administration with other agents, especially drugs with central nervous system activity, should be carefully monitored.

Usage in Pregnancy: Safety for use in pregnancy has not been established. Standard studies of fertility, teratology and reproduction were conducted in rats and rabbits. Daily oral doses of pemoline of 18.75 and 37.5 mg/kg beginning at conception produced no abnormalities in the fetuses and did not affect viability at birth. Further studies using similar dose levels with drug administration beginning 14 days before conception demonstrated an increased incidence of stillbirths in these animals.

Drug Dependence: Studies of the drug abuse potential of Cylert (pemoline) in primates have not demonstrated a potential for self-administration. However, the pharmacologic similarities between Cylert and other CNS stimulants with known abuse liability suggest that drug dependence of the stimulant type might occur. There have been isolated reports of transient psychotic symptoms in adults following long-term misuse of pemoline taken orally in excessive quantities. Therefore, caution should be observed in emotionally unstable patients considered to have a psychological potential for drug dependence.

Precautions: Delayed hypersensitivity reactions involving the liver have been reported in 1-2% of the patients receiving Cylert usually after several months of therapy. No clinical symptomatology has been observed, but mild to moderate increases in transaminase (SGOT and SGPT) levels have occurred in these cases. These effects appear to be completely reversible when drug treatment is discontinued. Transaminase levels should be determined periodically during therapy with Cylert to detect any such reactions.

Adverse Reactions: The most frequently reported adverse reaction with Cylert is insomnia. Insomnia has been observed prior to optimum therapeutic response and in the majority of cases was transient in nature or responded to dosage reduction. Anorexia with weight loss during the first few weeks of therapy has also been reported. With continuing therapy, a return to a normal weight curve usually occurred within three to six months. Other adverse reactions reported include stomachache, skin rash, irritability, mild depression, nausea, dizziness, headache, drowsiness, and hallucinations. Mild adverse reactions appearing early in treatment often remit with continuing therapy. If adverse reactions are of a significant or protracted nature, dosage reduction or discontinuation should be considered.

Dosage and Administration: Cylert (pemoline) is administered as a single oral dose each morning. The recommended starting dose is 37.5 mg per day. This daily dosage should be gradually increased at one week intervals using increments of 18.75 mg until the desired clinical response is obtained. The mean daily effective dose ranges from 56.25 to 75 mg per day. The maximum recommended daily dose of pemoline is 112.5 mg.

Clinical improvement with Cylert is gradual. Using the recommended schedule of dosage titration, significant benefit may not be evident until the third or fourth week of drug administration. Drug administration should be interrupted occasionally to determine if behavioral symptoms sufficient to require continuing therapy recur.

Overdosage: Cylert overdosage has been reported to produce symptoms of tachycardia, hallucinations, agitation, or restlessness. The treatment of acute massive overdosage with pemoline is essentially the same as that for overdosage with any drug having CNS stimulatory effects. Management is largely symptomatic and may include induction of emesis, gastric lavage or other measures as appropriate.

How Supplied: Cylert (pemoline) is supplied as monogrammed, grooved tablets in three dosage strengths:

18.75 mg. tablets (yellow-colored) in bottles of 100 (**NDC** 0074-6025-13)

37.5 mg. tablets (orange-colored) in bottles of 100 (**NDC** 0074-6057-13)

75 mg. tablets (tan-colored) in bottles of 100 (**NDC** 0074-6073-13)

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Please see next page for prescribing information.



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For management of schizophrenic and manic disorders in psychiatric hospitals, mental health clinics, and with outpatient treatment



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for maintenance or control of patients in hospital or home

BENEFITS

- generally improve cooperation and communication
- decrease need for custodial care, hasten discharge



CONCENTRATE
for maintenance or control of uncooperative in-hospital patients

- easily mixes with most liquids
- ensures easy, steady, certain administration



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- usually takes effect in 10 minutes
- average duration of effect is 6 hours

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Concentrate
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CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON **Injection** should not be given to patients in coma or severely depressed states.

WARNINGS **Dosage in pregnancy:** Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenazine should be under medical supervision, particularly if they are receiving high doses. Patients who have had any severe reaction to phenothiazines or to imipramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patients treated with perphenazine, the possibility that they might occur with TRILAFON should be considered: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the visual fields; pigmentation of the retina, cornea, or lens; cerebral edema; polyphagia; photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but not epinephrine, because epinephrine's action is blocked and partly reversed by perphenazine. Severe, acute hypotension has occurred with the use of phenothiazines and is of particular concern in patients with mitral insufficiency or pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic reaction to perphenazine; treatment with perphenazine should be stopped if this occurs.

The antiemetic effect of perphenazine can obscure signs of toxicity due to overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor or intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefore, contact of hands or clothing by those handling perphenazine solutions should be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-system-depressant actions of opiates, antihistamines, barbiturates, and alcohol, less than the usual dosage of these agents is required when they are administered concomitantly with TRILAFON. Patients should be cautioned that their response to alcohol may be increased while they are being treated with TRILAFON.

Phenothiazines also potentiate the effects of atropine, heat, and phosphorus insecticides, and should be used with caution in persons exposed to these agents.

ADVERSE REACTIONS *Extrapyramidal reactions:* dystonia including protrusion, discoloration, aching and rounding of the tongue; tonic spasm of the masticatory muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric crisis, trismus, torticollis, retrocollis, muscle weakness, and aching and numbness of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism; hyperreflexia; and ataxia. The incidence and severity of these reactions usually increase with increased dosage, but have occurred in some patients receiving low dosage. Reduction in dosage or treatment with an antispasmodic agent will usually control extrapyramidal reactions. In some instances, however, these reactions may persist after discontinuation of treatment with perphenazine.

Persistent tardive dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities. There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine, vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

Side effects with intramuscular TRILAFON **Injection** have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON (perphenazine) **Injection** is a rare occurrence.

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LIBRIUM®
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5 mg, 10 mg, 25 mg capsules

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

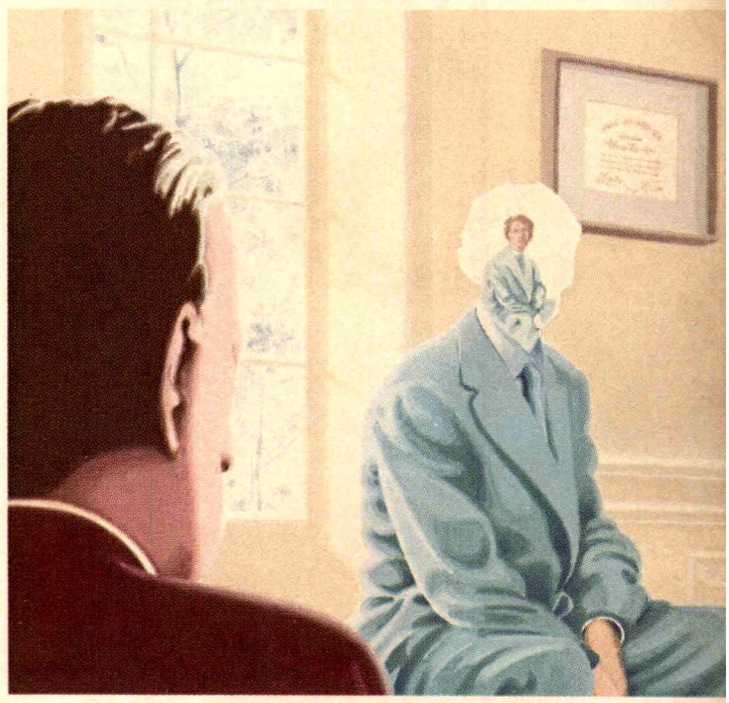
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg, or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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*Each ml contains the equivalent of 25 mg loxapine base as the HCl.

LOXITANE *loxapine*, a dibenzoxazepine compound represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f][1,4]oxazepine. It is present in the oral concentrate primarily as the HCl.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1 1/2 to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE C *loxapine hydrochloride* is indicated for the manifestations of schizophrenia.

LOXITANE has not been shown effective in the management of behavioral complications in patients with mental retardation.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

Usage in Pregnancy: Safe use of LOXITANE C *loxapine hydrochloride* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE C *loxapine hydrochloride*, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (e.g, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.



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In 31 studies involving 469 schizophrenic patients, certain favorable trends were exhibited in the LOXITANE side effects profile; these require further tests and broader clinical experience for confirmation.[1]

Same daily dosage schedule as with LOXITANE Capsules

The dropper is calibrated to conform to usual dosage requirements.



Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects: Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE C *loxapine hydrochloride* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensivitity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

DOSAGE AND ADMINISTRATION

LOXITANE C *loxapine hydrochloride* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

LOXITANE C Oral Concentrate should be mixed with orange or grapefruit juice shortly before administration.

Use only the enclosed calibrated (10 mg, 15 mg, 20 mg, 25 mg) dropper for dosage.

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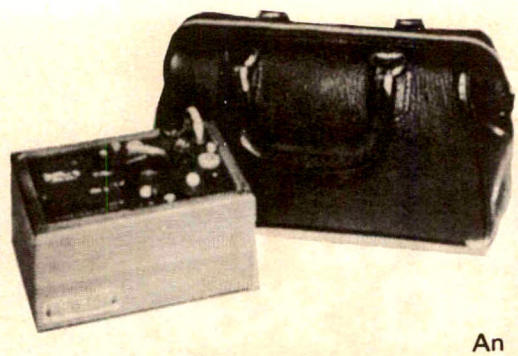
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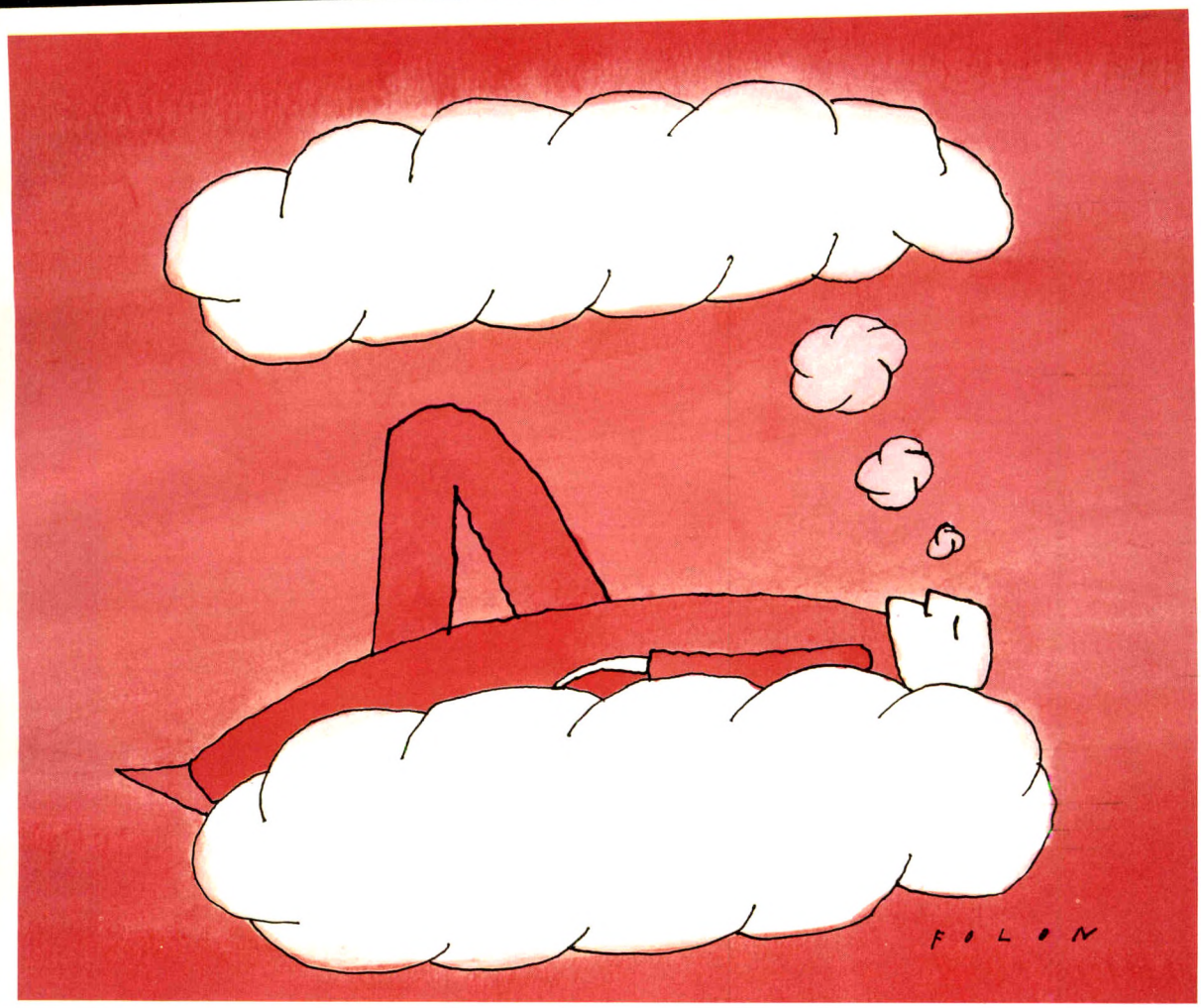
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by Anne M. Seiden



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Basic tools of primitive psychiatry



Mankpo: Sceptres or staffs used by the Heviosso (lightning God) cult in medical ceremonies among the Ewe of Tongo and Fon of Dahomey. *Right,* staff with leopard's head, bared teeth and tongue (Ewe, Togo). *Left,* staff with ram's head—the sacred animal of the Heviosso—in the form of a serpent symbolizing the fire-spitting rainbow God of healing (Fon, Dahomey). From the collection of the Segy Gallery, New York City.

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Probably effective: For the control of moderate to severe agitation, hyperactivity or aggressiveness in disturbed children.

Possibly effective: For control of excessive anxiety, tension and agitation as seen in neuroses.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose states, presence of large amounts of C.N.S. depressants, or bone marrow depression.

Warnings: Avoid using in patients hypersensitive (e.g., blood dyscrasia, jaundice) to any phenothiazine. Caution patients about activities requiring alertness (e.g., operating vehicles or machinery) especially during the first few days' therapy. Avoid concomitant use with alcohol. May counteract antihypertensive effect of guanethidine and related compounds.

Use in pregnancy only when essential. There are reported instances of jaundice or prolonged extrapyramidal signs in newborn whose mothers had received chlorpromazine.

Precautions: Use cautiously in persons with cardiovascular, liver or chronic respiratory disease, or with acute respiratory infections. Due to cough reflex suppression, aspiration of vomitus is possible. May prolong or intensify the action of C.N.S. depressants, organophosphorus insecticides, heat, atropine and related drugs. (Reduce dosage of concomitant C.N.S. depressants.) Anticonvulsant action of barbiturates is not intensified. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Discontinue high-dose, long-term therapy gradually.

Patients on long-term therapy, especially high doses, should be evaluated periodically for possible adjustment or discontinuance of drug therapy.

Adverse Reactions: Drowsiness, cholestatic jaundice, agranulocytosis, eosinophilia, leukopenia, hemolytic anemia, thrombocytopenic purpura and pancytopenia; postural hypotension, tachycardia, fainting, dizziness and, occasionally, a shock-like condition; reversal of epinephrine effects; EKG changes have been reported, but relationship to myocardial damage is not confirmed; neuromuscular (extrapyramidal) reactions; pseudo-parkinsonism, motor restlessness, dystonias, persistent tardive dyskinesia, hyperreflexia in the newborn; psychotic symptoms, catatonic-like states, cerebral edema; convulsive seizures; abnormality of the cerebrospinal fluid proteins; urticarial reactions and photosensitivity, exfoliative dermatitis, contact dermatitis; lactation and breast engorgement (in females on large doses), false positive pregnancy tests, amenorrhea, gynecomastia; hyperglycemia, hypoglycemia, glycosuria; dry mouth, nasal congestion, constipation, adynamic ileus, urinary retention, miosis, mydriasis; after prolonged substantial doses, skin pigmentation, epithelial keratopathy, lenticular and corneal deposits and pigmentary retinopathy, visual impairment; mild fever (after large I.M. dosage); hyperpyrexia; increased appetite and weight; a systemic lupus erythematosus-like syndrome; peripheral edema.

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1. Berne E: Principles of Group Treatment. New York, Oxford University Press, 1966, p 26
2. Schildkraut JJ: Tranylcypromine: effects on norepinephrine metabolism in rat brain. Am J Psychiatry 126:925–931, 1970
3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
4. Brosin H: Communication systems of the consultation process, in The Psychiatric Consultation. Edited by Mendel W, Solomon P. New York, Grune & Stratton, 1968, pp 1–12

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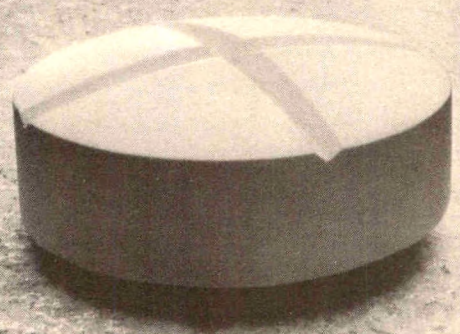
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One for the road.



Drunken driving is the cause of an estimated 28,000 auto accident deaths each year—approximately half of these fatal accidents involve an alcoholic. This is only one aspect of the staggering problem represented by alcoholism—perhaps this country's most neglected disease.

Yet, it needn't be, for alcoholism is treatable. Through early detection and treatment of the alcoholic, as well as the use of community resources, physicians can exert a major force in the control and reduction of alcoholism.

ANTABUSE (disulfiram) can help. It offers strong deterrent action...helping alcoholic patients maintain a state of sobriety, while they participate in a total treatment program. Your patient should know the consequences of even a single drink while taking this medication. ANTABUSE works by blocking the normal degradation of alcohol, sharply increasing the concentration of acetaldehyde in the blood by 5 to 10 times, and setting off a most unpleasant, though temporary reaction.

ANTABUSE helps strengthen your patient's resolve...while you help with his underlying problem. On ANTABUSE therapy, the alcoholic patient functions more effectively—not only behind the wheel, but also at work and at home.

BRIEF SUMMARY
(For full prescribing information, see package circular.)
ANTABUSE® (disulfiram) In Alcoholism
INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)
CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, *e.g.* cough syrups, tonics, and the like, should not be given ANTABUSE.
ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity.

WARNINGS: ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.
The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.
THE ANTABUSE-ALCOHOL REACTION:
ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.
The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.
The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.
DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.
Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.
It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.
Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.
CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.
USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.
PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)
Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.
Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.
ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)
Optic neuritis, peripheral neuritis, and polyneuritis may occur following administration of ANTABUSE.
Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.
In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.
Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.
One case of cholestatic hepatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.
DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.
INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.
MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.
NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.
DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.
TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, such a test reaction should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.
However, where a test reaction is deemed necessary, the suggested procedure is as follows:
After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (1/2 oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.
MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokalemia has been reported.
HOW SUPPLIED: No. 809—Each tablet (scored) contains 250 mg. disulfiram, in bottles of 100.
No. 810—Each tablet (scored) contains 500 mg. disulfiram, in bottles of 50 and 1,000. **7626**

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Tablets, 250 mg. and 500 mg.



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in clinically significant depression...

penetrating the symptom barrier to productive psychotherapy

symptoms often interfere with therapy

In clinically significant depression, the patient often becomes barricaded behind his own symptoms during psychotherapy. Because these symptoms can be so sharply defined and somatic in expression, he may reject the fact that they are psychic in origin. Sleep disturbance, gastrointestinal complaints, anorexia, chronic fatigue, and other psychosomatic symptoms may so preoccupy—or overwhelm—the depressed patient that truly productive therapeutic sessions are difficult to achieve. Instead of being able to concentrate on the core emotional problems of the depression itself, he may for example go on at length about how broken his sleep is or keep reiterating (while the therapeutic hour slips by) how physically miserable he feels.

ELAVIL®
(AMITRIPTYLINE HCl, MSD)
to help penetrate the symptom barrier in depression requiring medication

ELAVIL, a highly effective tricyclic antidepressant, will often alleviate these symptoms. With the help of ELAVIL, sleep disturbance—so common in clinically depressed patients and often the symptom that distresses them most—as



well as other "barrier symptoms" may be lessened to the point where they no longer come between you and the patient.

psychotherapy takes direction

As these preoccupying complaints are lifted, psychotherapy sessions can become more productive. Patients are enabled to respond more fruitfully during therapeutic hours and to resume or pursue more efficiently the necessary activities in their personal lives.

meeting therapeutic goals

And as the antidepressant activity of ELAVIL (Amitriptyline HCl, MSD) takes hold, it helps relieve the depressive condition itself. Sometimes only a minimum of actual psychotherapy is required. The patient may experience a more rapid recovery—while you conserve valuable time.

Prescribe ELAVIL then, to help lighten the patient's burden in depression—and yours in its management.

ELAVIL should not be used during the acute recovery phase following myocardial infarction; in patients hypersensitive to it; in those who have received an MAOI within two weeks; or in children under 12. Patients with cardiovascular disorders should be watched closely. Its safe use during pregnancy and lactation has not been established. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

TABLETS: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg
INJECTION: 10 mg per ml

ELAVIL®
(AMITRIPTYLINE HCl | MSD)

an antidepressant with an anxiety-reducing sedative component to its action



MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

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MERCK SHARP & DOHME

addendum

ELAVIL®

(AMITRIPTYLINE HCl | MSD)

Five tablet strengths for differing patient needs. The variety of dosage strengths available with ELAVIL makes possible great prescribing flexibility.

Once-a-day dosage at bedtime is an appropriate way to start—and maintain—many patients on therapy. The simplicity of this regimen helps improve patient compliance. ELAVIL may also be prescribed in divided daily doses.

A sedative effect may be apparent before the antidepressant effect of ELAVIL is noted. An adequate therapeutic effect may take as long as 30 days to develop.

100 mg
75 mg
50 mg



These tablets may be advantageous when initiating therapy with once-daily bedtime dosage in adult outpatients. The usual starting dosage is 75 mg daily. Therapy may be initiated with 50 to 100 mg daily. This may be increased by 25 or 50 mg as necessary in the bedtime dose to a total of 150 mg per day.

These tablets may also be convenient for many hospitalized patients. These patients may need 100 mg a day initially which can be increased gradually to 200 mg a day if necessary. A small number of such patients may need as much as 300 mg a day.

25 mg 

This tablet may prove useful when initiating therapy with divided daily doses in adult outpatients. Starting dosage is usually 75 mg daily. If necessary, this dosage may be increased gradually to a total of 150 mg a day. Increases are made preferably in the late afternoon or bedtime doses.

10 mg 

Because lower doses are generally recommended for adolescents and elderly patients, the 10-mg tablets may be most serviceable. Ten mg three times a day with 20 mg at bedtime may be satisfactory in adolescent and elderly patients who do not tolerate higher doses.

NOTE: The usual maintenance dosage of ELAVIL is 50 to 100 mg per day which may be given in a single dose preferably at bedtime. In some patients 40 mg per day is sufficient. This drug is not recommended for patients under 12 years of age.

Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure; in patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child. Not recommended for patients under 12 years of age.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.
When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required; paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported. Use with caution in patients with impaired liver function.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue, rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; tablets containing 75 mg and 100 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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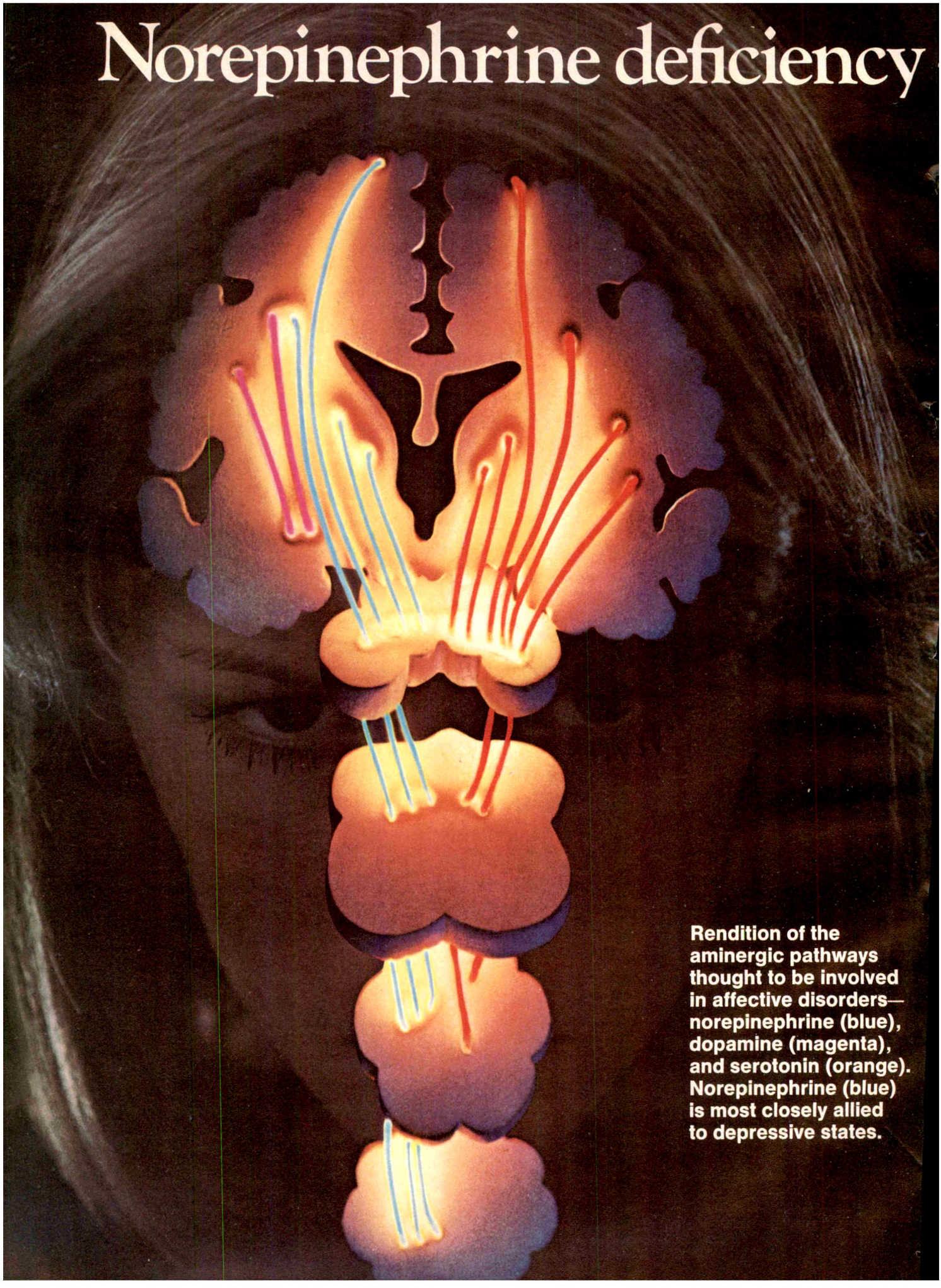
The November 1976 issue of

The American Journal of Psychiatry

will feature

- A Bicentennial Address: Benjamin Rush and Those Who Came After Him by Francis J. Braceland

Norepinephrine deficiency



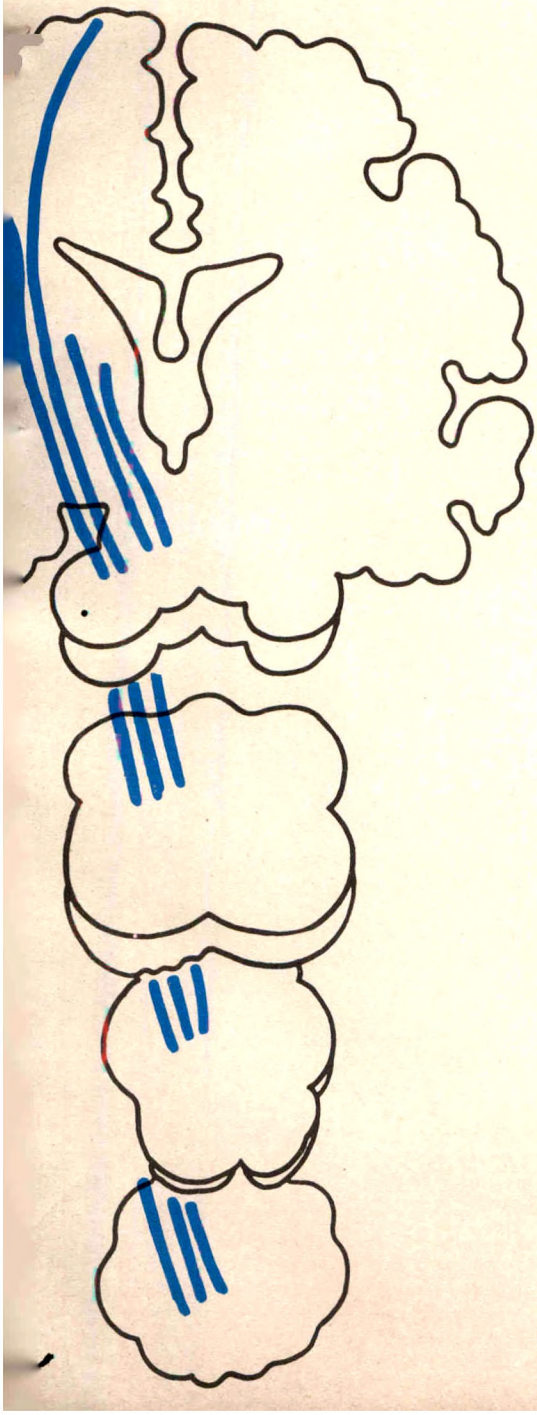
Rendition of the aminergic pathways thought to be involved in affective disorders—norepinephrine (blue), dopamine (magenta), and serotonin (orange). Norepinephrine (blue) is most closely allied to depressive states.

...in depression*

Pertofrane®

☐ raises norepinephrine levels

☐ effectively relieves symptoms



Theory

☐ Recent research has shown that depression may be associated with a deficiency of brain norepinephrine.[1] This thesis is supported by findings that certain depressive disorders respond when norepinephrine levels are increased.

Fact

☐ Pertofrane is a monomethylated tricyclic and possesses greater ability to raise brain norepinephrine levels at the synapse than dimethylated forms such as imipramine and amitriptyline.[2,3]

☐ Clinical experience with Pertofrane has shown rapid onset of action...relief of associated mild anxiety/agitation...mid-range sedation...and compatibility with tranquilizers and sedatives. Pertofrane is available in 25 and 50 mg. capsules. Usual dosage: one capsule t.i.d.

Pertofrane®
(desipramine hydrochloride NF)

When activity is important

USV PHARMACEUTICALS

USV Pharmaceutical Mfg. Corp.
Manati, P.R. 00701

*Not all depressions are associated with deficiencies of norepinephrine as measured by MHPG.

Please see next page for brief summary of prescribing information and references.



Pertofrane®
(desipramine HCl)
When activity is important

Indication: For relief of mental depression. **Contraindications:** Do not use MAO inhibitors concomitantly or within 2 weeks of the use of this drug. Hyperpyretic crises or severe convulsive seizures may occur with such combinations; potentiation of adverse reactions can be serious or even fatal. When substituting Pertofrane (desipramine HCl) in patients receiving an MAO inhibitor, allow an interval of at least 14 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated following recent myocardial infarction and in patients with a known hypersensitivity to tricyclic antidepressants. **Warnings:** Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm. Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold). This drug may block the action of the antihypertensive, guanethidine, and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery. The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures. Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery. Do not use in women who are or may become pregnant, or in children under 12 years of age, unless the clinical situation warrants the potential risk. Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients. **Precautions:** Potentially suicidal patients require careful supervision and protective measures during therapy. Prescriptions should be limited to small quantities. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances. Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy. **Adverse Reactions:** The following have been reported: *Nervous System:* dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG patterns, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract:* anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin:* skin rashes (including photosensitization), perspiration and flushing sensations. *Liver:* rare cases of transient jaundice(apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements:* bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System:* orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System:* urinary frequency or retention and impotence. *Endocrine System:* occasional hormonal effects, including gynecomastia, galactorrhea and breast enlargement, and decreased libido and estrogenic effect. *Sensitivity:* urticaria and rare instances of drug fever and cross-sensitivity with imipramine. **Dosage:** All patients except geriatric and adolescent: 50 mg. t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg. daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg. daily. Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response. Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated. **How Supplied:** 25 mg. capsules (pink), bottles of 100 and 1000. Also, 50 mg. capsules (maroon and pink), bottles of 100 and 1000.

References:
1. Maas, J.W. et al.: Arch. Gen. Psychiatry 26:252, 1972. 2. Ayd, F.J., Jr.: Int. Drug Ther. Newsletter 10:21, June 1975. 3. Byck, R.: in The Pharmacological Basis of Therapeutics (Goodman, L.S. and Gilman, A., eds.), ed. 5, New York, Macmillan, 1975, p. 176.

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Now... once-a-day antidepressant dosage with an a.m. or h.s. option



Norpramin®
(desipramine hydrochloride tablets NF) 25 mg., 50 mg. tablets

(See following pages for prescribing information

New flexible administration to help the depressed patient

Clinical studies show that a single daily administration of Norpramin is as effective and well tolerated as the same quantity given as a divided dosage. This means that Norpramin may be given once daily—morning or bedtime—at a time most appropriate to the patient's therapeutic need, drug response and activity patterns.

a.m. dosage may be preferred

For patients who feel more depressed in the morning and want to take their medication at that time, Norpramin can help patients get started with their daily responsibilities and encourage participation in various forms of psychotherapy.

To reduce the potential for confusion in medication schedules when other agents are prescribed concomitantly at bedtime.

For patients in hospitals and nursing homes where there may be greater availability of staff qualified to administer medication during morning hours.

h.s. dosage may be preferred

Bedtime dosage may be particularly appropriate for patients who experience significant sedation, or when bedtime dosage best suits individual activity patterns. Administration of Norpramin at night rarely produces morning hangover.

Norpramin®
(desipramine hydrochloride tablets NF)

Brief Summary
Indications: Norpramin (desipramine hydrochloride tablets NF) is indicated for the relief of depressive symptoms. Endogenous depressions are more likely to be alleviated than others.
Contraindications: Desipramine hydrochloride should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Contraindications include the acute recovery period following myocardial infarction and hypersensitivity to the drug. Cross sensitivity with other dibenzazepines is a possibility.
Warnings: 1. Extreme caution should be used in patients: (a) with cardiovascular disease, (b) with a history of urinary retention or glaucoma, (c) with thyroid disease or those on thyroid medication, (d) with a history of seizure disorder. 2. This drug is capable of blocking the antihypertensive effect of guanethidine and similarly acting compounds. 3. *Use in Pregnancy:* Safe use during pregnancy and lactation has not been established. 4. *Use in Children:* Norpramin is not recommended for use in children. 5. This drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. Therefore, the patient should be cautioned accordingly.
Precautions: This drug should be dispensed in the least possible quantities to depressed outpatients, since suicide has been accomplished with drugs of this class. If possible, dispense in child-resistant containers. It should be kept out of reach of children. Reduce dosage, or alter treatment, if serious adverse effects occur. Norpramin therapy in patients with manic-depressive illness may induce a hypomanic state after the depressive phase terminates and may cause exacerbation of psychosis in schizophrenic patients. Use cautiously with anticholinergic or sympathomimetic drugs. Response to alcoholic beverages may be exaggerated. In the concurrent administration of ECT and antidepressant drugs one should consider the possibility of increased risk relative to benefits. Discontinue as soon as possible prior to elective surgery because of possible cardiovascular effects. Hypertensive episodes have been observed during surgery in patients on desipramine hydrochloride. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is neutropenia.

function actively

Early therapeutic response— builds hope and provides encouragement

While full therapeutic effect may require two to three weeks, onset of action has often been observed in two to five days. Although results have been variable, the weight of scientific reports suggests a faster onset of action with desipramine than with either imipramine or amitriptyline.

Divided or once-a-day dosage with an a.m. or h.s. option

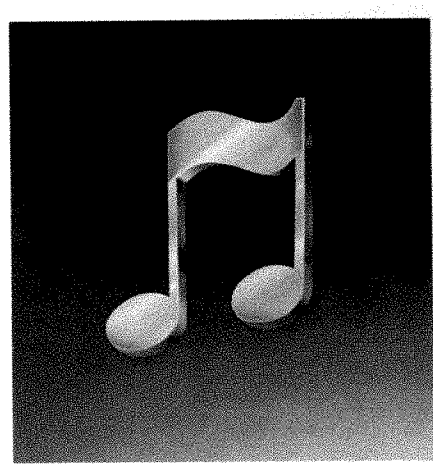
Usual Adult Dose:

The usual adult dosage is 100 to 200 mg. per day. Dosage should be initiated at a lower level and increased according to tolerance and clinical response to a maximum of 200 mg. daily.

Dosages above 200 mg. per day are not recommended. Initial therapy may be administered in divided doses or a single daily dose.

Maintenance therapy may also be given on a once daily schedule for patient convenience and better compliance.

See prescribing information for geriatric and adolescent dosage.



Norpramin®

(desipramine hydrochloride tablets NF) 25 mg., 50 mg. tablets

lightens and brightens the days of your depressed patients— more conveniently

Adverse Reactions: *Cardiovascular:* hypotension, ypertension, tachycardia, palpitation, arrhythmias, eart block, myocardial infarction, stroke. *Psychiatric:* onfusional states (especially in the elderly), hallu- inations, disorientation, delusions; anxiety, restless- ess, agitation; insomnia and nightmares; hypomania; xacerbation of psychosis. *Neurological:* numbness, ngling, paresthesias of extremities; incoordination, taxia, tremors; peripheral neuropathy; extrapyramidal ymptoms; seizures; alteration in EEG patterns; tinni- us. *Anticholinergic:* dry mouth, and rarely associated ublingual adenitis; blurred vision, disturbance of ccommodation, mydriasis; constipation, paralytic eus; urinary retention, delayed micturition, hypotonic ladder. *Allergic:* skin rash, petechiae, urticaria, itch- photosensitization, edema (of face and tongue general), drug fever, cross sensitivity with other tricyclic drugs. *Hematologic:* bone marrow depressions including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* anorexia, nausea and vomiting, epigastric distress, peculiar taste, abdominal cramps, diarrhea, stomatitis, black tongue. *Endocrine:* gynecomastia, breast enlargement and galactorrhea in the female; increased or decreased libido, impotence, testicular swelling; elevation or depression of blood sugar levels. *Other:* jaundice (simulating obstructive), altered liver function; weight gain or loss, perspiration, flushing; urinary frequency, nocturia; parotid swelling; drowsiness, dizziness, weakness and fatigue, headache; alopecia. *Withdrawal Symptoms:* Though not indicative of addiction, abrupt cessation after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: *Usual adult dose:* 100 mg. to 200 mg. per day. Dosages above 200 mg. per day are not recommended. *Initial therapy:* Should be administered at a low level and increased according to tolerance and response. It may be administered in divided doses or a single daily dose. *Maintenance:* Lower adequate dose once daily to maintain remission. *Adolescent and geriatric patient dose:* 25 mg. to 100 mg. per day, in single or divided doses. Dosages above 100 mg. are not recommended.

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LIBRIUM®
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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THE ANXIETY-SPECIFIC

Please see summary of product information on opposite page.

Schizophrenia

by Royal Doulton

There is a brooding quality to the figure. She seems lost in her world, cut off from reality, perhaps suspicious, withdrawn and anxious...suggestively schizophrenic in demeanor.

Actual title: 'Romance'. From the Royal Doulton Figurine Collection...one of the many exquisite figures from the master craftsmen of ceramic sculpture, destined to become a collector's item.



Serentil® (mesoridazine)

by Aguilar, *et al.*

"...'hard-core' chronic schizophrenics who have either regressed to a lower level of functioning after initial improvement, or have failed to respond to previous psychotropic medication...can improve significantly [with] Serentil."
Aguilar SJ: Dis Nerv Syst, 36:484, 1975.

"...the onset of mesoridazine's activity can be observed even on the first day of treatment. This rapid onset of action [with the I.M. dosage form] makes mesoridazine valuable in the treatment of psychiatric emergencies."*
Hamid TA and Wertz WJ: Am J Psych 130:689, 1973.

*Because of possible hypotensive effects, parenteral administration should be reserved for bedfast patients or for acute ambulatory cases. Patients should be kept lying down for at least one-half hour after injection.

"...remarkably low incidence of adverse reactions when compared with other phenothiazine compounds."
Serentil Prescribing Information, PDR, 1976.

In prescribing Serentil, observe the same precautions as with other phenothiazines, including awareness of all adverse reactions observed with them. (As with other phenothiazines, patients refractory to previous medications may respond to Serentil.)
Please see next page for a brief summary of the prescribing information, including contraindications and adverse reactions.

Serentil® (mesoridazine) as the besylate

Available in 3 dosage forms: Tablets: 10, 25, 50 and 100 mg. Concentrate: 25 mg/cc. Injectable: 1 cc (25 mg).

—Side effects are usually mild or moderate.

—Except for tremor and rigidity, adverse reactions are usually found in patients receiving high doses early in treatment.

—Low incidence of Parkinson's syndrome.

—Drowsiness and hypotension are the most prevalent side effects encountered.

Indication: Schizophrenia.

Contraindications: Severe central nervous system depression, comatose states and hypersensitivity to the drug.

Warnings: Administer cautiously and increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence it should be given only when the anticipated benefits exceed the possible risk to mother and fetus. Not recommended for use in children under 12 years of age since safe conditions for this use have not been established. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides.

Precautions: Ocular changes have been seen with other phenothiazines but, to date, have not been related to mesoridazine. Because of possible hypotensive effects, reserve parenteral administration for bedfast patients or acute ambulatory cases, and keep patient lying down for at least one-half hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. A single case of transient granulocytopenia has been associated with mesoridazine. Patients receiving anticonvulsant medication should be continued on that regimen while receiving mesoridazine to prevent possible convulsive seizures. As with most medications, the dosage of mesoridazine should be adjusted to the needs of the individual and the lowest effective dosage should always be used.

Adverse Reactions: Mesoridazine has demonstrated a remarkably low incidence of adverse reactions compared with other phenothiazine compounds. Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision have occurred. Inhibition of ejaculation, impotence, enuresis, incontinence. Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. Hypotension, tachycardia, EKG changes. The following reactions have occurred with



phenothiazines and should be considered: miosis, obstipation, anorexia, paralytic ileus. Erythema, exfoliative dermatitis, contact dermatitis. Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. Fever, laryngeal edema, angioneurotic edema, asthma. Jaundice, biliary stasis. Changes in terminal portion of the EKG, including prolongation of the Q-T interval, lowering and inversion of the T wave and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including mesoridazine. These appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms would appear to be of questionable value as a predictive device. Hypotension, rarely resulting in cardiac arrest has also been noted. Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, akinesia. As with all antipsychotics, tardive dyskinesia may appear on long-term therapy or after long-term therapy is discontinued. Risks seem to be greater in elderly patients on high dose therapy, especially females. Discontinue all antipsychotic agents if the symptoms of tardive dyskinesia syndrome appear. (See full prescribing information for description of the symptoms of the tardive dyskinesia syndrome). Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. Retention, incontinence. Hyperpyrexia, behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses and toxic confusional states. Following long-term therapy, a peculiar skin-eye syndrome marked by progressive pigmentation of areas of the skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea. Systemic lupus erythematosus-like syndrome.

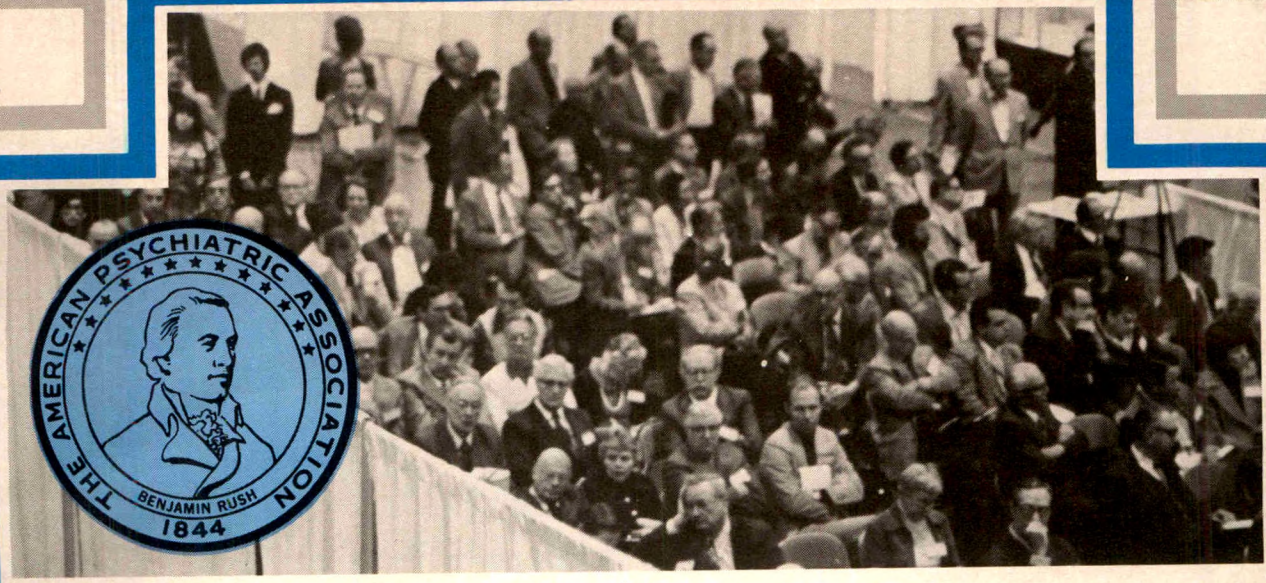
How Supplied: *Tablets:* 10 mg., 25 mg., 50 mg. and 100 mg. mesoridazine (as the besylate); packages of 100 and 5000.

Ampuls: 1 cc. [25 mg. mesoridazine (as the besylate).] Inactive ingredients: disodium edetate, U.S.P., 0.5 mg.; sodium chloride, U.S.P., 7.2 mg.; carbon dioxide gas (bone dry) q.s.; water for injection, U.S.P., q.s. to 1 cc.; boxes of 20 and 100. *Concentrate:* 25 mg. mesoridazine (as the besylate) per cc., alcohol, U.S.P., 0.61% by volume. Immediate containers. Amber glass bottles of 4 fl. oz.

For complete details, please see the full prescribing information.

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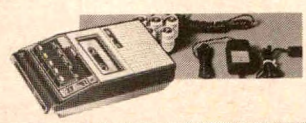
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APA-B

ADAPIN®
(Doxepin HCl)

Capsules, 10 mg., 25 mg., 50 mg.

And the Management of Disturbed Sleep Patterns in Anxiety/Depression

Disturbed sleep patterns are a familiar component of the symptom complex seen in patients with anxiety and/or depression.

One study[1] has shown that doxepin [Adapin] is helpful in providing symptomatic relief of sleep disturbances associated with anxiety and depression, "allowing patients to fall asleep more rapidly and feel more rested upon awakening."

Another study[2] points out that doxepin [Adapin] given "at bedtime to outpatients with mixed anxiety and depression will yield as much improvement as can be obtained by giving the drug three times a day."

So, a single dose of Adapin, given at bedtime can often help promote a restful night's sleep for patients with mixed anxiety and depression. Other clinical benefits include:

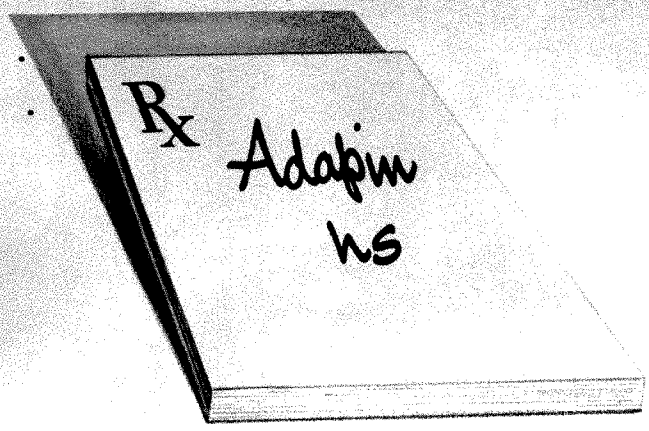
- rapid antianxiety effect
- distinct clinical brightening of mood—usually within three to four weeks
- low incidence of side effects
- suitability for long-term usage

PENNWALT

Pennwalt Prescription Products
Pharmaceutical Division
Pennwalt Corporation
Rochester, New York 14603

1. Goldberg HL, Finnerty RJ: The use of doxepin in the treatment of symptoms of anxiety neurosis and accompanying depression: a collaborative controlled study. *Am J Psychiatry* **129**:106-109, 1972.
2. Goldberg HL, Finnerty RJ, Cole JO: Doxepin: Is a single daily dose enough? *Am J Psychiatry* **131**:1027-1029, 1974.

Please see adjoining page for prescribing information.



Available as



10-mg. capsules



25-mg. capsules



50-mg. capsules

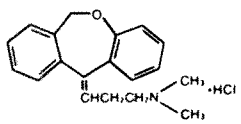
ADAPIN®

(Doxepin HCl)

Prescribing information:

DESCRIPTION

Adapin (doxepin HCl) is an isomeric mixture of N, N-dimethyl-dibenz(b,e) oxepin- $\Delta^{11(6H)}$, γ propylamine hydrochloride.



ACTIONS

Adapin has a variety of pharmacological actions with its predominant action on the central nervous system. While its mechanism of action is not known, studies have demonstrated that it is neither a monoamine oxidase inhibitor nor a primary stimulant of the central nervous system.

INDICATIONS

In controlled clinical evaluations, **Adapin** has shown marked antianxiety and significant antidepressant effects. **Adapin** has been found to be well tolerated even in elderly patients.

Adapin is indicated for the treatment of patients with:

1. Psychoneurotic anxiety and/or depressive reactions.
2. Mixed symptoms of anxiety and depression.
3. Anxiety and/or depression associated with alcoholism.
4. Anxiety associated with organic disease.
5. Psychotic depressive disorders including involutional depression and manic-depressive reactions.

Target symptoms of psychoneurosis that respond particularly well to **Adapin** include: anxiety, tension, depression, somatic symptoms and concerns, insomnia, guilt, lack of energy, fear, apprehension and worry.

Because **Adapin** provides antidepressant as well as antianxiety effects, it is of particular value in patients in whom anxiety masks depression. Patients who have not responded to other antianxiety or antidepressant drugs may benefit from **Adapin.**

In a large series of patients systematically observed for withdrawal symptoms, none were reported—a finding which is consistent with the virtual absence of euphoria as a side effect and the lack of addictive potential characteristic of this type of chemical compound.

CONTRAINDICATIONS

Because **Adapin** has an anticholinergic effect, it is contraindicated in patients with glaucoma or a tendency toward urinary retention.

Use of **Adapin** is contraindicated in patients who have been found hypersensitive to it.

WARNINGS

Usage in Pregnancy—Adapin has not been evaluated in pregnant patients. Therefore, it should not be used during pregnancy unless, in the judgment of the physician, it is essential to the welfare of the patient.

In animal reproduction studies of **Adapin (doxepin hydrochloride),** gross and microscopic examination of the offspring gave no evidence of drug-related teratogenic effect. Following doses of up to 25 mg./kg./day for 8 to 9 months, no changes were observed in the number of live births, litter size, or lactation. A decreased rate of conception was observed when male rats were given 25 mg./kg./day for prolonged periods—an effect which has occurred with other psychotropic drugs and has been attributed to drug effect on the central and/or autonomic nervous systems.

Usage in Children—The use of **Adapin** in children under 12 years of age is not recommended, because safe conditions for its use have not been established.

MAO Inhibitors—Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with **Adapin.** The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered, and the dosage involved.

PRECAUTIONS

Drowsiness may occur with **Adapin;** therefore, patients should be warned of its possible occurrence and cautioned against driving a motor vehicle or operating hazardous machinery while taking the drug.

Patients should also be cautioned that the effects of alcoholic beverages may be increased.

Since suicide is an inherent risk in depressed patients and remains a risk through the initial phases of improvement, depressed patients should be closely supervised.

Although **Adapin** has shown effective tranquilizing activity, the possibility of activating or unmasking latent psychotic symptoms should be kept in mind.

Compounds structurally related to **Adapin** can block the effects of guanethidine and similarly acting compounds. However, at the usual clinical dosages, 75 mg. to 150 mg. per day, **Adapin** has been given concomitantly with guanethidine without blocking its antihypertensive effect. But at dosages of 300 mg. per day or higher, **Adapin** has exerted a significant blocking effect.

Adapin, like other structurally related psychotropic drugs, potentiates norepinephrine response in animals. But this effect has not been observed with **Adapin** in humans, which is in accord with the low incidence of tachycardia reported clinically.

ADVERSE REACTIONS

Anticholinergic Effects: Dry mouth, blurred vision and constipation have been reported. These are usually mild, and often subside as therapy is continued or dosage reduced.

Central Nervous System Effects: Drowsiness has been observed. It usually occurs early in the course of therapy and tends to subside as therapy continues. (See Dosage and Administration section.)

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported adverse effects include extrapyramidal symptoms, gastrointestinal reactions, secretory effects (such as increased sweating), weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

DOSAGE AND ADMINISTRATION

In most patients with mild to moderate anxiety and/or depression: 10 mg. to 25 mg. t.i.d. to start. A starting dosage of 10 mg. t.i.d. for a period of four days may reduce the initial drowsiness experienced by some patients, and may be tried in cases where drowsiness is clinically undesirable. Decrease or increase the dosage at appropriate intervals according to individual response. Usual optimum dosage is 75 mg. to 150 mg. per day.

In some patients with mild symptomatology or emotional symptoms accompanying organic disease, dosage as low as 25 mg. to 50 mg. per day has provided effective control.

In more severe anxiety and/or depression: 50 mg. t.i.d. may be required to start—if necessary, gradually increase to 300 mg. per day. Additional effectiveness is rarely obtained by exceeding 300 mg. per day.

Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

OVERDOSAGE

Symptoms—An increase of any of the reported adverse reactions, primarily excessive sedation and anticholinergic effects such as blurred vision and dry mouth. Other effects may be: pronounced tachycardia, hypotension and extrapyramidal symptoms.

Treatment—Essentially symptomatic; supportive therapy in the case of hypotension and excessive sedation.

HOW SUPPLIED

Each capsule contains doxepin, as the hydrochloride, 10 mg. (NDC 0018-0356), 25 mg. (NDC 0018-0357), and 50 mg. (NDC 0018-0358) capsules in bottles of 100 and 1000.

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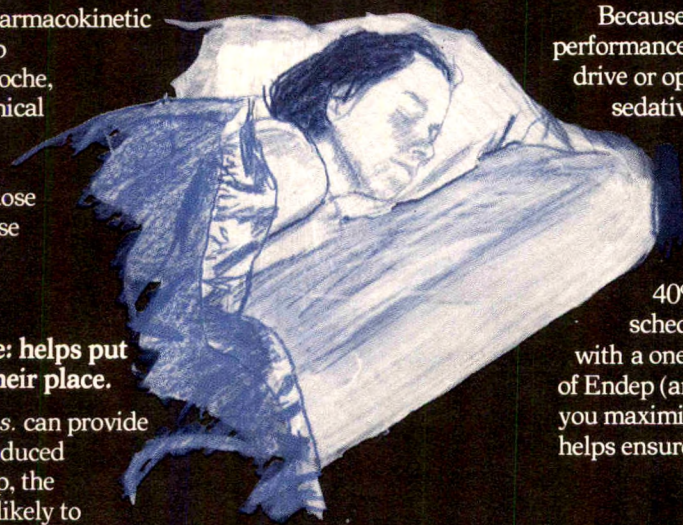
Put depression to rest

The h.s. schedule: provides symptomatic relief throughout the next day.

Because of its pharmacokinetic characteristics, Endep (amitriptyline HCl) Roche, provides the same clinical effect over a period of time when given as a single daily *h.s.* dose or as 1/3 the same dose given *t.i.d.*

The h.s. schedule: helps put side effects in their place.

100 mg Endep *h.s.* can provide relief of depression-induced insomnia. Once asleep, the patients are also less likely to notice anticholinergic side effects—such as dry mouth—which reach a peak hours after the *h.s.* dose.



Midnight

Because the sedative effect may impair patients' performance during daytime, warn patients not to drive or operate dangerous machinery until the sedative potential has been clearly established.

The h.s. schedule: helps maximize patient compliance.

According to one investigation, only 40% of patients comply with a *t.i.d* drug schedule whereas 93% of patients comply with a one-dose-a-day schedule.[1] An *h.s.* schedule of Endep (amitriptyline HCl), therefore, should help you maximize patient compliance which, in turn, helps ensure prompt recovery.

ROCHE

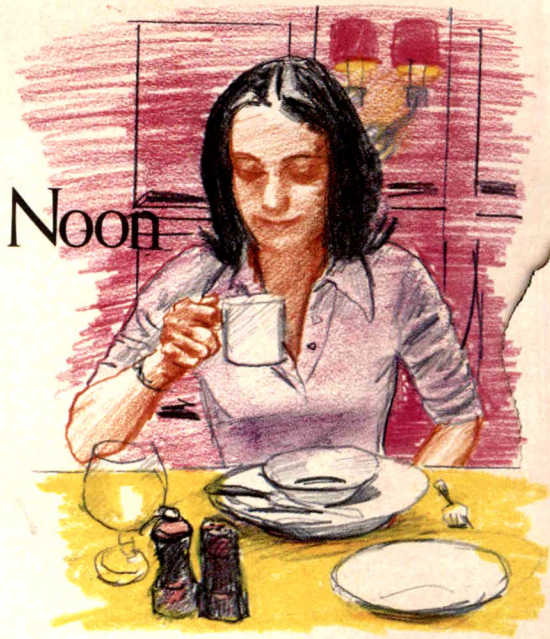
all day long

The 100-mg strength: early signs of progress.

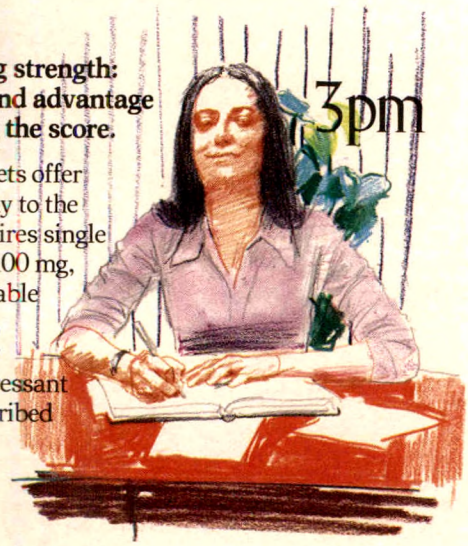
Many depressed patients with insomnia and anorexia begin to show improvement during the first week of Endep (amitriptyline HCl) therapy. Patients with symptoms of "neurotic" depression usually improve during the first week, whereas those with "psychotic" depression usually do not improve until the third week of therapy. However, adequate response may require up to 30 days in both types.



8am



Noon



3pm

The 100-mg strength: the economy and advantage of knowing the score.

- 100-mg tablets offer potential economy to the patient who requires single doses of 50 mg, 100 mg, or 150 mg. Available as scored tablets, Endep is the only tricyclic antidepressant that can be prescribed in half doses.

The 100-mg strength: emphasis on individualization of dosage.

The introduction of the 100-mg scored tablet brings to 5 the number of Endep dosage strengths now available as scored tablets: 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg.

1. Ayd FJ, Jr. (Ed): *Int Drug Ther Newslett* 7:35-50, Sept 10, 1972

2. Haskell DS, *et al:* Rapidity of Symptom Reduction in Depressions Treated with Amitriptyline. *J Nerv Ment Dis 160:* 24-33, 1975



7pm

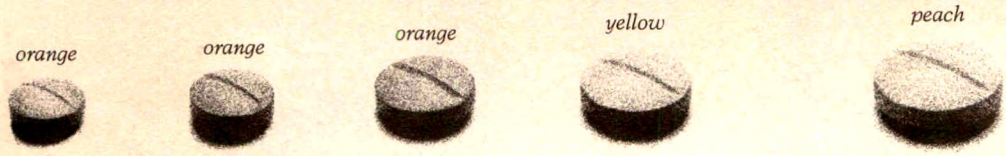
with new 100mg Endep®



amitriptyline HCl/Roche

Before prescribing, please consult complete product information, a summary of which appears on the following page.

Endep®
amitriptyline HCl/Roche



10 mg | 25 mg | 50 mg | 75 mg | Just released 100 mg

The only tricyclic antidepressant with scored tablets

- By relieving underlying depression Endep (amitriptyline HCl), in responsive patients, lifts mood and relieves symptoms such as anorexia, loss of interest, inability to concentrate, decreased libido or GI disturbances, often within three or four weeks after starting therapy.
- Endep usually relieves accompanying sleep disturbances, particularly early in the treatment regimen.
- All five dosage strengths are scored for greater flexibility and convenience in titration.
- The *h.s.* dosage minimizes skipped doses, maximizes patient acceptance and compliance.
- Specifying Endep assures quality plus potential economy.

Important Considerations

Should not be given concomitantly with an MAO inhibitor or within 2 weeks of its administration.

Patients should use caution in the performance of hazardous tasks such as operating machinery or driving a motor vehicle.

May enhance the effects of alcohol, barbiturates and other CNS depressants.

Not recommended for use during the acute recovery phase following myocardial infarction.

Patients with suicidal tendencies should not have easy access to large quantities of the drug.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: To relieve symptoms of depression (notably endogenous depressions) and depression accompanied by anxiety.

Contraindications: Known hypersensitivity. Do not use with monoamine oxidase (MAO) inhibitors or within at least 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Use not recommended during acute recovery phase after myocardial infarction.

Warnings: May block action of guanethidine or similar antihypertensives. Use with caution in patients with history of seizures, urinary retention, angle closure glaucoma, increased intraocular pressure. Closely supervise cardiovascular patients, hyperthyroid patients and those receiving thyroid medications. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, including amitriptyline HCl, especially in high doses. Myocardial infarction and stroke reported with use of this class of drugs.) May impair alertness; warn against hazardous occupations or driving a motor vehicle during therapy. Weigh possible benefits against hazards during pregnancy, the nursing period and in women of childbearing potential. Not recommended in children under 12.

Precautions: May exaggerate symptoms in schizophrenic and paranoid patients, or shift manic-depressives to manic stage; reduce dose or administer major tranquilizer concomitantly. Close supervision and careful dose adjustments required when given with anticholinergic or sympathomimetic agents. Exercise care in patients receiving large doses of ethchlorvynol; transient delirium reported with concomitant administration. May enhance effects of alcohol, barbiturates and other CNS depressants. Because of the possibility of suicide in depressed patients, do not permit easy access to large drug quantities in these patients. Because it may increase hazards of electroshock therapy, limit concomitant use to essential treatment. If possible, discontinue drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: Note: This list includes a few adverse reactions not reported with this specific drug but requiring consideration because of similarities of tricyclic antidepressants. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache and malaise. These are not indicative of addiction.

Dosage: Initiate at low levels; increase gradually, watching for signs of intolerance. As long as 30 days may elapse before adequate antidepressant effect develops; sedative effect may be noted earlier.

Initial Adult Dosage: Outpatients—25 mg *t.i.d.*; may be increased to 150 mg/day. Add increased drug to afternoon and/or bedtime doses. Alternate—50 to 100 mg *h.s.*, gradually increasing *h.s.* dose up to 150 mg/day. Hospitalized Patients—Up to 100 mg/day; increase gradually to 200 mg if necessary. A few patients may require 300 mg/day.

Adolescent and Elderly Patients: In general, 10 mg *t.i.d.* with 20 mg *h.s.* may be satisfactory for those who do not tolerate higher doses.

Maintenance Dosage: With symptomatic improvement, reduce dosage to lowest amount that gives relief, usually 25 mg *b.i.d.* to *q.i.d.*, or 10 mg *q.i.d.* Continue maintenance therapy 3 months or longer to avoid relapse.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestations and treatment.

Supplied: 10-mg, 25-mg, 50-mg, 75-mg and 100-mg scored tablets—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 60 (10 mg, 25 mg and 50 mg) or 30 (75 mg and 100 mg), available singly and in trays of 10.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

In depression... when biogenic amine deficits may exist



Indication: For relief of mental depression. **Contraindications:** Do not use MAO inhibitors concomitantly or within 2 weeks of the use of this drug. Hyperpyretic crises or severe convulsive seizures may occur with such combinations; potentiation of adverse reactions can be serious or even fatal. When substituting Pertofrane (desipramine HCl) in patients receiving an MAO inhibitor, allow an interval of at least 14 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated following recent myocardial infarction and in patients with a known hypersensitivity to tricyclic antidepressants. **Warnings:** Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm. Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold). This drug may block the action of the antihypertensive, guanethidine, and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery. The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures. Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery. Do not use in women who are or may become pregnant, or in children under 12 years of age, unless the clinical situation warrants the potential risk. Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients. **Precautions:** Potentially suicidal patients require careful supervision and protective measures during therapy. Prescriptions should be limited to small quantities. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances. Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy. **Adverse Reactions:** The following have been reported: *Nervous System:* dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG patterns, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract:* anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin:* skin rashes (including photosensitization), perspiration and flushing sensations. *Liver:* rare cases of transient jaundice (apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements:* bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System:* orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System:* urinary frequency or retention and impotence. *Endocrine System:* occasional hormonal effects, including gynecomastia, galactorrhea and breast enlargement, and decreased libido and estrogenic effect. *Sensitivity:* urticaria and rare instances of drug fever and cross-sensitivity with imipramine. **Dosage:** All patients except geriatric and adolescent: 50 mg. t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg. daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg. daily. Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response. Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated. **How Supplied:** 25 mg. capsules (pink), bottles of 100 and 1000. Also, 50 mg. capsules (maroon and pink), bottles of 100 and 1000.

Pertofrane®
(desipramine HCl NF)

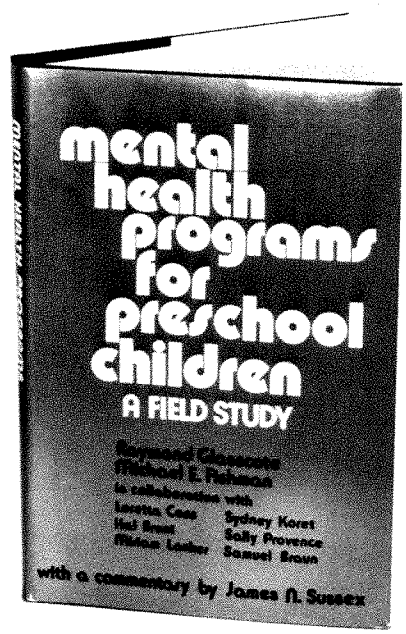
to help restore neurochemical balance

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An articulate exposition of the immense problems and encouraging accomplishments in a particularly difficult area of endeavor . . . . Beyond their concern with the manifestly ill child, the authors intriguingly explore what may be needed to enhance the mental good health of all young children . . . . A significant contribution.

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President, American Association of Psychiatric Services for Children

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No default insurance

Tofranil-**PM**®
imipramine **pamoate**

Geigy

In depression

Daily Dosage Chart



1 h.s.

A major reason for drug defaulting is multiple daily dosage schedules.

Ayd* reports that 70 percent of patients default on a q.i.d. regimen; 60 percent on t.i.d.; 30 percent on b.i.d., and only 7 percent on a single daily dose.

A single daily capsule that provides a full day's medication would logically assure better therapeutic results.

Because one capsule lasts from bedtime to bedtime, Tofranil-**PM**® may markedly reduce the probability of missed doses.

After therapy is initiated with the 75-mg. capsule, the 150-mg. capsule is the dose level at which optimum response is usually obtained.

Please review the prescribing information summarized on the back of this page.

*Ayd, F.J., Jr. (Ed.): Int. Drug Ther. Newslett. 7(9/10):35-50 (Nov./Dec.) 1972.

Tofranil-PM®
imipramine pamoate

One capsule
lasts from bedtime
to bedtime.

Initial Dose

For Maintenance Therapy

Starting Dose	Usual Optimum Response Dose	A Full Range to Choose From*			
					
75 mg.	150 mg.	150 mg.	125 mg.	100 mg.	75 mg.

*Each capsule contains imipramine pamoate equivalent to 150, 125, 100 or 75 mg. imipramine hydrochloride.

Tofranil-PM®
brand of imipramine pamoate

Indications: For the relief of symptoms of depression. Endogenous depression is more likely to be alleviated than other depressive states.

Contraindications: The concomitant use of monoamine oxidase inhibiting compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur in patients receiving such combinations. The potentiation of adverse effects can be serious, or even fatal. When it is desired to substitute Tofranil-PM, brand of imipramine pamoate, in patients receiving a monoamine oxidase inhibitor, as long an interval should elapse as the clinical situation will allow, with a minimum of 14 days. Initial dosage should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated during the acute recovery period after a myocardial infarction. Patients with a known hypersensitivity to this compound should not be given the drug. The possibility of cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

—patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
—patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
—hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
—patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
—patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Since imipramine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as operating an automobile or machinery, the patient should be cautioned accordingly.

Usage in Children: Tofranil-PM, brand of imipramine pamoate, should not be used in children of any age because of the increased potential for acute overdosage due to the high unit potency (75 mg., 100 mg., 125 mg. and 150 mg.). Each capsule contains imipramine pamoate equivalent to 75 mg., 100 mg., 125 mg. or 150 mg. imipramine hydrochloride.

Precautions: It should be kept in mind that the possibility of suicide in seriously depressed patients is inherent in the illness and may persist until significant remission occurs. Such patients should be carefully supervised during the early phase of treatment with Tofranil-PM, brand of imipramine pamoate, and may require hospitalization. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, Tofranil-PM, brand of imipramine pamoate, may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g., paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Avoid the use of preparations, such as decongestants and local anesthetics, which contain any sympathomimetic amine (e.g., adrenalin, noradrenalin), since it has been reported that tricyclic antidepressants can potentiate the effects of catecholamines.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential, since there is limited clinical experience.

Adverse Reactions: Note: Although the listing which follows includes a few adverse reactions which have not been reported with this specific drug, the pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when imipramine is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue); drug fever; cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: In adult outpatients, therapy should be initiated on a once-a-day basis with 75 mg./day. This may be increased to 150 mg./day which is the dose level which usually obtains optimum response. If necessary, dosage may be increased to 200 mg./day. Dosage should be modified as necessary by clinical response and any evidence of intolerance. Daily dosage may be given at bedtime, or in some patients in divided daily doses.

Hospitalized patients should be started on a once-a-day basis with 100-150 mg./day and may be increased to 200 mg./day. Dosage should be increased to 250-300 mg./day if there is no response after two weeks.

Following remission, maintenance medication may be required for a longer period of time at the lowest dose that will maintain remission. The usual adult maintenance dosage is 75-150 mg./day on a once-a-day basis, preferably at bedtime.

In adolescent and geriatric patients, capsules of Tofranil-PM, brand of imipramine pamoate, may be used when total daily dosage is established at 75 mg. or higher. It is generally unnecessary to exceed 100 mg./day in these patients. This dosage may be given once a day at bedtime or, if needed, in divided daily doses.

How Supplied: Tofranil-PM, brand of imipramine pamoate: Capsules of 75, 100, 125 and 150 mg. (Each capsule contains imipramine pamoate equivalent to 75, 100, 125 or 150 mg. of imipramine hydrochloride.)
(B) 98-146-840-A(9/75) 667120

For complete details, including dosage and administration, please refer to the full prescribing information.

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NEW ORAL CONCENTRATE

Loxitane® C

LOXAPINE HYDROCHLORIDE

Lederle

25 mg base/ml* In bottles of 4 fl. oz.

Effectiveness – the only clue that it's there

DESCRIPTION

*Each ml contains the equivalent of 25 mg loxapine base as the HCl.

LOXITANE *loxapine*, a dibenzoxazepine compound represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f][1,4]oxazepine. It is present in the oral concentrate primarily as the HCl.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1 1/2 to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE C *loxapine hydrochloride* is indicated for the manifestations of schizophrenia.

LOXITANE has not been shown effective in the management of behavioral complications in patients with mental retardation.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

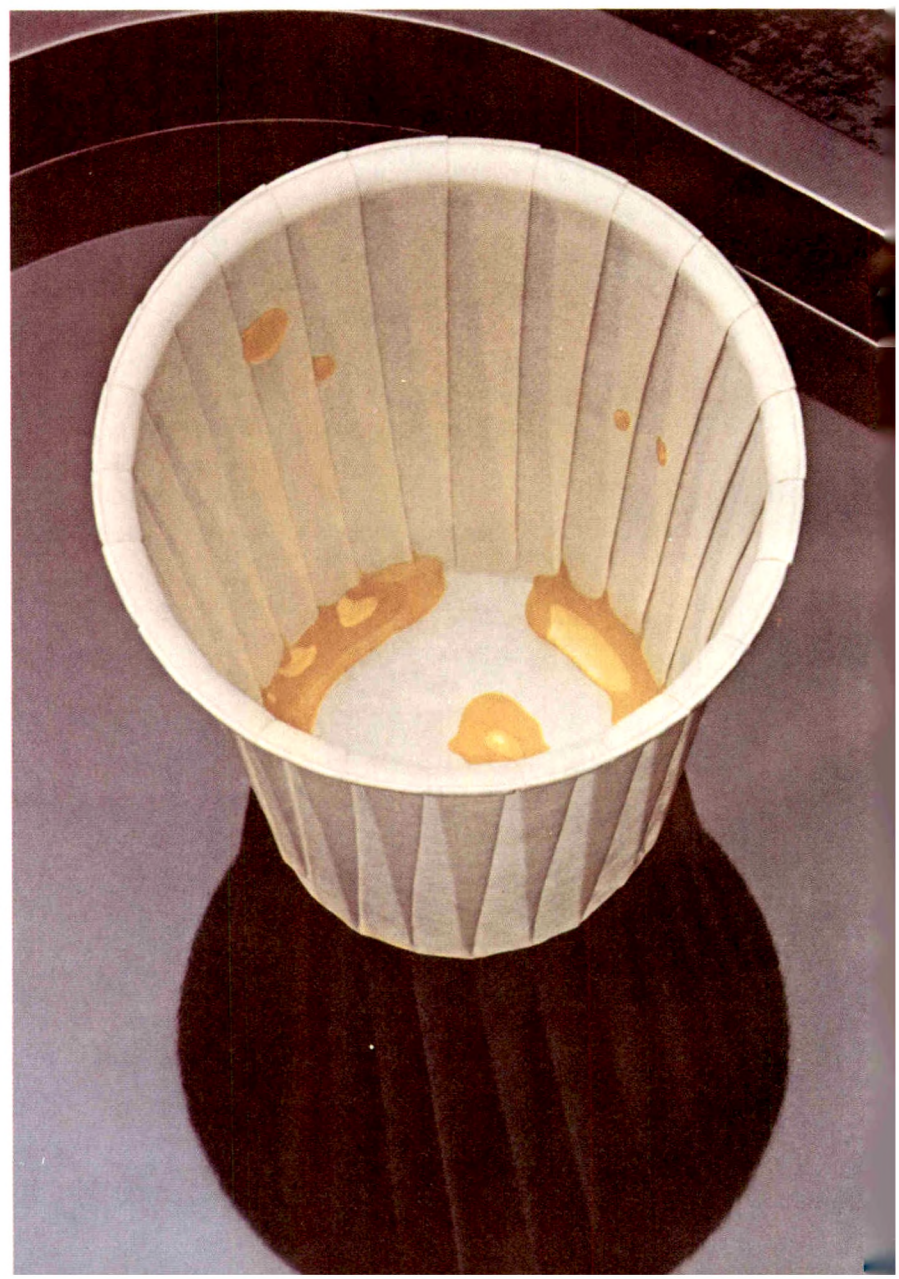
Usage in Pregnancy: Safe use of LOXITANE C *loxapine hydrochloride* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE C *loxapine hydrochloride*, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (e.g. operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.



Tasteless in orange, grapefruit and pineapple juices

Highly acceptable to patients who prefer medication in fruit juices, and a logical alternative to tablets or capsules when good patient management depends on uninterrupted treatment. LOXITANE C Oral Concentrate is as easy to take as the fruit juice in which it may be administered.

Same efficacy as LOXITANE Capsules

Efficacy that speaks for itself with substantial reduction in the symptoms of schizophrenia.

Same favorable side effects profile as with LOXITANE Capsules[1]

In 31 studies involving 469 schizophrenic patients, certain favorable trends were exhibited in the LOXITANE side effects profile; these require further tests and broader clinical experience for confirmation.[1]

Same daily dosage schedule as with LOXITANE Capsules

The dropper is calibrated to conform to usual dosage requirements.



Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects: Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE C *loxapine hydrochloride* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensivitity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

DOSAGE AND ADMINISTRATION

LOXITANE C *loxapine hydrochloride* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

LOXITANE C Oral Concentrate should be mixed with orange or grapefruit juice shortly before administration.

Use only the enclosed calibrated (10 mg, 15 mg, 20 mg, 25 mg) dropper for dosage.

HOW SUPPLIED

LOXITANE C *loxapine hydrochloride* is supplied in bottles of 4 fl. oz. (120 ml) with calibrated dropper. Each ml contains the equivalent of 25 mg loxapine base as the HCl. Rev 4/76

Because schizophrenia is symptoms

LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York 10965

795-6

1. See LOXITANE C package insert for detailed information concerning side effects, contraindications, warnings and precautions.



If you think adjunctive antianxiety therapy is indicated...

Consider Serax® (oxazepam). It has been proved useful when anxiety and tension aren't responsive to simple reassurance and counsel.

Serax has been found valuable, particularly in the older patient, in the management and control of clinically significant anxiety, tension, agitation and irritability. It may also be useful where anxiety accompanies an underlying organic disorder.

Of special importance to elderly patients, Serax may be taken generally without fear of serious side effects.* Its dosage flexibility† generally permits adjustment to individual patient needs, making Serax a convenient adjunct to your therapy in the older patient.

Special care must, of course, be taken in prescribing antianxiety agents for elderly patients, especially where cardiac complications might ensue from a drop in blood pressure. And careful attention must be paid to dosage recommendations and follow-up observation.

*See following important information.
†See package circular for full prescribing information.

In Brief:

Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease. Anxiety associated with depression is also responsive to oxazepam therapy. This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients. Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: Use in Pregnancy:

An increased risk of congenital malformations associated with the use of minor tranquilizers (chlordiazepoxide, diazepam, and meprobamate) during the first trimester of pregnancy has been suggested in several studies. Serax, a benzodiazepine derivative, has not been studied adequately to determine whether it, too, may be associated with an increased risk of fetal abnormality. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. The possibility that a woman of childbearing potential may be pregnant at the time of institution of therapy should be considered. Patients should be advised that if they become pregnant during therapy or intend to become pregnant they should communicate with their physician about the desirability of discontinuing the drug.

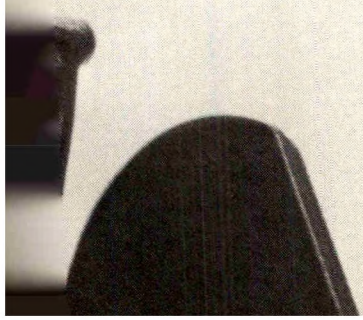
Precautions: Hypotensive reactions are rare, but use with caution where cardiac complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

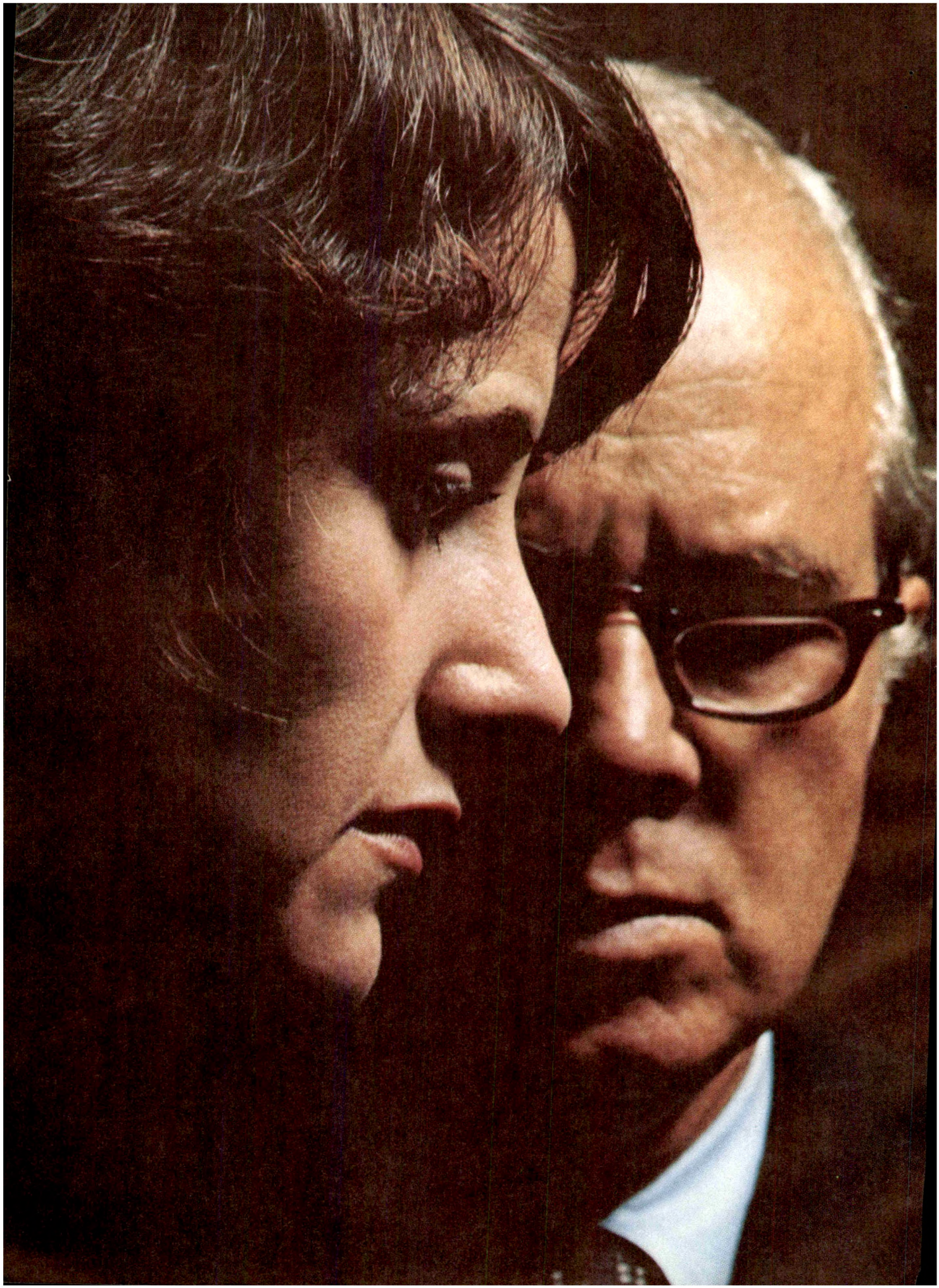
Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

In clinically significant anxiety

Serax®
(oxazepam)



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The TRIAVIL® Potential in the management of moderate to severe anxiety with depression

When time and talk are not enough...
The therapist is the primary catalyst for change in the psychotherapeutic relationship. However, when patients suffer from moderate to severe anxiety with depression, there are situations when TRIAVIL can often be a useful adjunct.

...TRIAVIL may help
There are three important benefits you may expect when TRIAVIL is part of the treatment program: (1) When symptoms of moderate to severe anxiety or agitation with depression are relieved, the patient may become more accessible and cooperative. (2) As somatic manifestations are controlled, attention may be focused on underlying causative factors. (3) Symptomatic relief may enable the patient to function more effectively in his daily life while your work with the patient progresses.

Tablets TRIAVIL are available in four different combinations affording flexibility and individualized dosage adjustment. Since it is simpler to remember to take one tablet rather than several (particularly in multiple daily doses), your patients on TRIAVIL will be more likely to take proper doses of the medication.

TRIAVIL is contraindicated in CNS depression from drugs; in the presence of evidence of bone marrow depression; and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to other drugs or mask other disorders. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please turn to the following page.

when patients exhibit moderate to marked anxiety or agitation with symptoms of depression

TRIAVIL® **containing perphenazine and amitriptyline HCl**

a tranquilizer-antidepressant

for highly effective relief of depression with moderate anxiety

TRIAVIL®

containing perphenazine and amitriptyline HCl a tranquilizer-antidepressant

Available:

TRIAVIL® 2-25: Each tablet contains 2 mg perphenazine and 25 mg amitriptyline HCl

TRIAVIL® 2-10: Each tablet contains 2 mg perphenazine and 10 mg amitriptyline HCl

TRIAVIL® 4-25: Each tablet contains 4 mg perphenazine and 25 mg amitriptyline HCl

TRIAVIL® 4-10: Each tablet contains 4 mg perphenazine and 10 mg amitriptyline HCl

INITIAL THERAPY FOR MANY PATIENTS
TRIAVIL® 2-25 (or TRIAVIL® 4-25) t.i.d. or q.i.d.

FOR FLEXIBILITY IN ADJUSTING MAINTENANCE THERAPY
TRIAVIL® 2-10 (or TRIAVIL® 4-10)

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

For more detailed information, consult your MSD Representative or see full Prescribing Information.
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The vulnerable ages

The first epileptic seizure is most likely to occur during early childhood and at the onset of puberty

About 9 out of 10 epileptics experience their first seizure before the age of 20—with the highest incidence between 5 and 7, when children start school, and at the onset of puberty, a time of physiological and psychic turmoil.[1] The most common type, grand mal, occurs in approximately 75% of epileptic children,[1] and more than 50% of patients who suffer initially from petit mal develop grand mal seizures before they reach the age of 16.[2]

Mysoline (primidone) for control of grand mal, psychomotor and focal epilepsy

At the onset and afterwards — used alone or as concomitant therapy, MYSOLINE may reduce the frequency and severity of major motor seizures—or even eliminate them. *Excellent* for control of grand mal. Valuable for control of psychomotor[1,3,4] and focal epilepsy as well.[5]

Add Mysoline when control with other anticonvulsants is inadequate — As concomitant therapy, MYSOLINE can improve seizure control in grand mal and psychomotor epilepsy. The combined use of phenobarbital, diphenylhydantoin, and MYSOLINE may have additive anticonvulsant effects without additive side effects.[6]

Change to Mysoline when other anticonvulsants fail — A changeover to MYSOLINE is frequently warranted when other anticonvulsants must be discontinued because of important side effects, or when grand mal seizures are refractory to phenobarbital, with or without diphenylhydantoin.[7]

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Mysoline® (primidone)

Tablets 250 mg.
50 mg.
Suspension 250 mg./5 cc.

May be the start of a better life for the epileptic

See following page of advertisement for prescribing information.

7538

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may be the start of a better life for the epileptic

initial and maintenance therapy for
grand mal, psychomotor and focal epilepsy

BRIEF SUMMARY
(For full prescribing information, see package circular.)

MYSOLINE® Brand of PRIMIDONE
Anticonvulsant

ACTIONS: MYSOLINE acts on the central nervous system to raise seizure threshold or alter seizure pattern. The mechanism(s) of action of anticonvulsant drugs is not known.

Primidone has anticonvulsant activity *per se*. In addition, its two metabolites possess anticonvulsant qualities. The major metabolite is phenylethylmalonamide (PEMA); the other is phenobarbital. In addition to its own anticonvulsant potential, PEMA potentiates phenobarbital.

INDICATIONS: MYSOLINE, either alone or used concomitantly with other anticonvulsants, is indicated in the control of grand mal, psychomotor, and focal epileptic seizures. It may control grand mal seizures refractory to other anticonvulsant therapy.

CONTRAINDICATIONS: Primidone is contraindicated in: 1) patients with porphyria and 2) patients who are hypersensitive to phenobarbital (see ACTIONS).

WARNINGS: The abrupt withdrawal of antiepileptic medication may precipitate status epilepticus.

The therapeutic efficacy of a dosage regimen takes several days before it can be assessed.

Use in pregnancy: Recent reports strongly suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Reference has been made to primidone in several cases in which it was used *in combination* with other anticonvulsants; but its teratogenicity has not been conclusively demonstrated. The possibility exists that other factors, *e.g.*, genetic factors or the epileptic condition, may contribute to the higher incidence of birth defects. The data also indicate that the great majority of mothers receiving anticonvulsant medication deliver normal infants.

Anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent major seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and risk to both mother and the unborn child.

When the nature, frequency, and severity of the seizures do not pose a clear threat to the patient, good medical practice requires that the physician weigh the expected therapeutic benefit of anticonvulsant therapy against possible risk on an individual basis.

Neonatal hemorrhage, with a coagulation defect resembling vitamin K deficiency, has been described in newborns whose mothers were taking primidone and other anticonvulsants. Pregnant women under anticonvulsant therapy should receive prophylactic vitamin K_1 therapy for one month prior to, and during, delivery.

The physician should weigh all of the foregoing considerations when treating and counseling epileptic women of childbearing potential.

PRECAUTIONS: The total daily dosage should not exceed 2 Gm. Since MYSOLINE therapy generally extends over prolonged periods, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

In nursing mothers: There is evidence that in mothers treated with primidone, the drug appears in the milk in substantial quantities. Since tests for the presence of primidone in biological fluids are too complex to be carried out in the average clinical laboratory, it is suggested that the presence of undue somnolence and drowsiness in nursing newborns of MYSOLINE-treated mothers be taken as an indication that nursing should be discontinued.

ADVERSE REACTIONS: The most frequently occurring early side effects are ataxia and vertigo. These tend to disappear with continued therapy, or with reduction of initial dosage. Occasionally, the following have been reported: nausea, anorexia, vomiting, fatigue, hyperirritability, emotional disturbances, sexual impotency, diplopia, nystagmus, drowsiness, and morbilliform skin eruptions. Occasionally, persistent or severe side effects may necessitate withdrawal of the drug. Megaloblastic anemia may occur as a rare idiosyncrasy to MYSOLINE and to other anticonvulsants. The anemia responds to folic acid, 15 mg. daily, without necessity of discontinuing medication.

DOSAGE AND ADMINISTRATION: The average adult dose is 0.75 to 1.5 Gm. per day. The initial dose is 250 mg. Increments of 250 mg. are added, usually at weekly intervals, to tolerance, or therapeutic effectiveness, up to daily doses not exceeding 2.0 Gm. A typical dosage schedule for the introduction of MYSOLINE (primidone) is as follows:

Adults and Children Over 8 Years of Age

1st Week 250 mg. daily at bedtime	*2nd Week* 250 mg. b.i.d.
3rd Week 250 mg. t.i.d.	*4th Week* 250 mg. q.i.d.

In children under 8 years of age, maintenance levels are established by a similar schedule, but at one-half the adult dosage. It is best to begin with 125 mg., with gradual weekly increases of 125 mg. a day, to a daily total usually between 500 mg. and 750 mg.

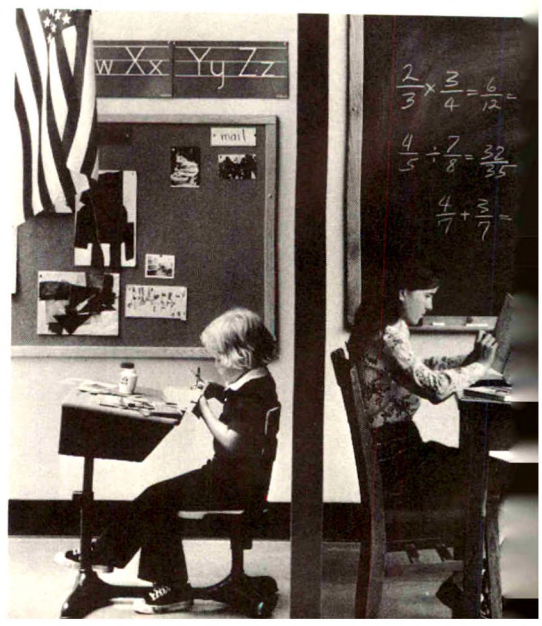
In patients already receiving other anticonvulsants: MYSOLINE should be gradually increased as dosage of the other drug(s) is maintained or gradually decreased. This regimen should be continued until satisfactory dosage level is achieved for combination, or the other medication is completely withdrawn. When therapy with this product alone is the objective, the transition should not be completed in less than two weeks.

MYSOLINE 50 mg. Tablet can be used to practical advantage when small fractional adjustments (upward or downward) may be required, as in the following circumstances:

- for initiation of combination therapy
- during "transfer" therapy
- for added protection in periods of stress or stressful situations that are likely to precipitate seizures (menstruation, allergic episodes, holidays, etc.)

HOW SUPPLIED: MYSOLINE *Tablets*—No. 430—Each tablet contains 250 mg. of primidone (scored), in bottles of 100 and 1,000. Also in unit dose package of 100. No. 431—Each tablet contains 50 mg. of primidone (scored), in bottles of 100 and 500. MYSOLINE *Suspension*—No. 3850—Each 5 cc. (teaspoonful) contains 250 mg. of primidone, in bottles of 8 fluid-ounces.

References: 1. Livingston, S.: Comprehensive Management of Epilepsy in Infancy, Childhood and Adolescence, Springfield, Ill., Charles C Thomas, 1972, pp. 6, 7, 584. 2. Grossman, H.J.: Ill. Med. J. *135*:260 (Mar.) 1969. 3. Scholl, M.L., in Conn, H.F.: Current Therapy 1973, Philadelphia, Saunders, 1973, pp. 675-7. 4. Metrick, S.: C.M.D. *37*:49 (Jan.) 1970. 5. Forster, F.M.: Med. Clin. North Am. *47*:1579 (Nov.) 1970. 6. White, P.T.: Wis. Med. J. *68*:178 (Apr.) 1969. 7. Millichap, J.G.: Drug Ther. *1*:15 (Oct.) 1971.



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for management of disturbed behavior in schizophrenic and manic states

- low dose, high potency phenothiazine useful for inpatient and outpatient treatment
- helps orient psychiatric patients to their surroundings
- effective with minimal sedation, usually produces little lethargy or drowsiness

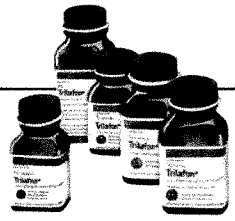
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Tablets	2,4,8,16 mg
REPETABS® Tablets 8 mg brand of repeat-action tablets	

Please see next page for prescribing information.



Trilafon®
brand of
perphenazine, NF

For management of schizophrenic and manic disorders in psychiatric hospitals, mental health clinics, and with outpatient treatment



TABLETS
for maintenance or control of patients in hospital or home

BENEFITS

- generally improve cooperation and communication
- decrease need for custodial care, hasten discharge



CONCENTRATE
for maintenance or control of uncooperative in-hospital patients

- easily mixes with most liquids
- ensures easy, steady, certain administration



INJECTION
for emergency control of uncooperative in-hospital patients

- usually takes effect in 10 minutes
- average duration of effect is 6 hours

TRILAFON® Tablets
brand of perphenazine, NF
REPETABS® Tablets
Concentrate
Injection

CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON **Injection** should not be given to patients in coma or severely depressed states.

WARNINGS **Dosage in pregnancy:** Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenazine should be under medical supervision, particularly if they are receiving high doses. Patients who have had any severe reaction to phenothiazines or to imipramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patients treated with perphenazine, the possibility that they might occur with TRILAFON should be considered: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the visual fields; pigmentation of the retina, cornea, or lens; cerebral edema; polyphagia; photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but not epinephrine, because epinephrine's action is blocked and partly reversed by perphenazine. Severe, acute hypotension has occurred with the use of phenothiazines and is of particular concern in patients with mitral insufficiency or pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic reaction to perphenazine; treatment with perphenazine should be stopped if this occurs.

The antiemetic effect of perphenazine can obscure signs of toxicity due to overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor or intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefore, contact of hands or clothing by those handling perphenazine solutions should be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-system-depressant actions of opiates, antihistamines, barbiturates, and alcohol, less than the usual dosage of these agents is required when they are administered concomitantly with TRILAFON. Patients should be cautioned that their response to alcohol may be increased while they are being treated with TRILAFON.

Phenothiazines also potentiate the effects of atropine, heat, and phosphorus insecticides, and should be used with caution in persons exposed to these agents.

ADVERSE REACTIONS *Extrapyramidal reactions:* dystonia including protrusion, discoloration, aching and rounding of the tongue; tonic spasm of the masticatory muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric crisis, trismus, torticollis, retrocollis, muscle weakness, and aching and numbness of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism; hyperreflexia; and ataxia. The incidence and severity of these reactions usually increase with increased dosage, but have occurred in some patients receiving low dosage. Reduction in dosage or treatment with an antispasmodic agent will usually control extrapyramidal reactions. In some instances, however, these reactions may persist after discontinuation of treatment with perphenazine.

Persistent tardive dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities. There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine, vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

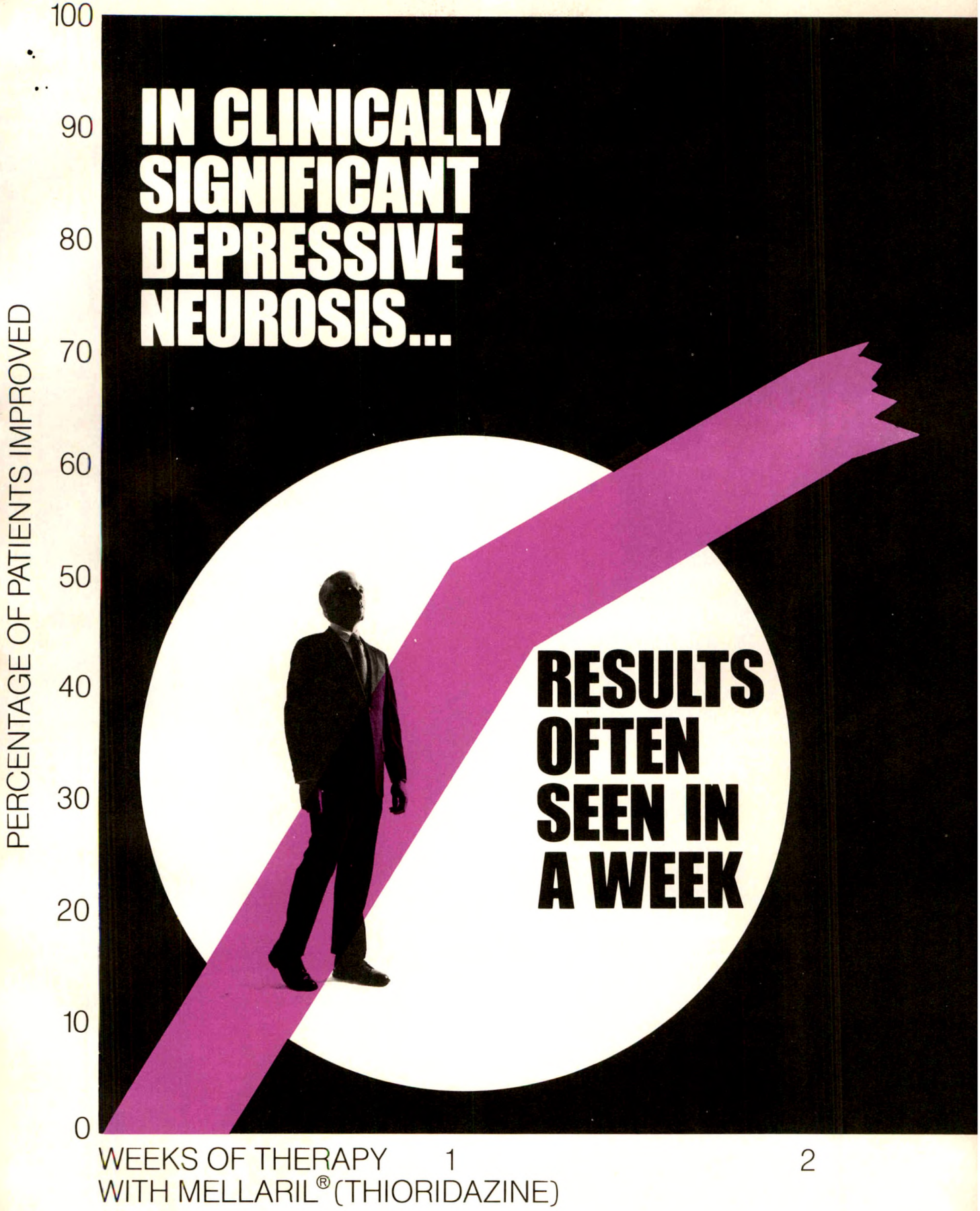
Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

Side effects with intramuscular TRILAFON **Injection** have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON (perphenazine) **Injection** is a rare occurrence.

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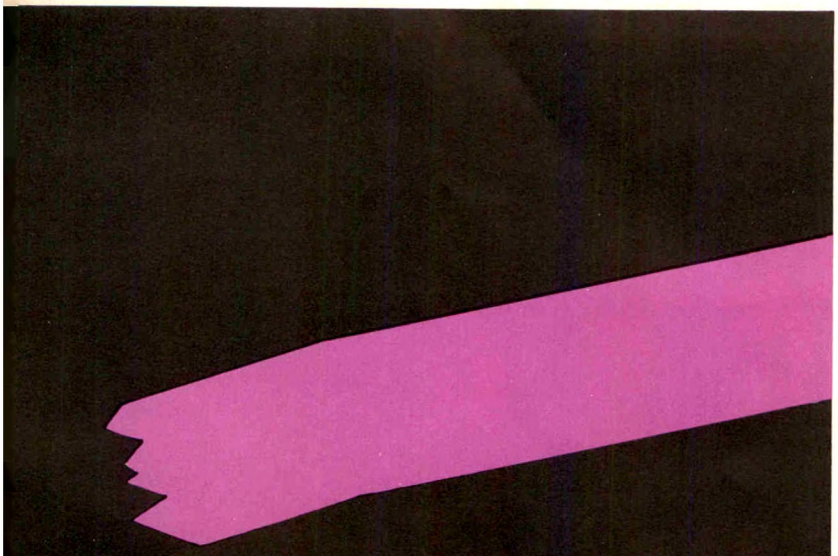
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For details of study and brief summary, please see following page.



Mellaril (thioridazine) can help you cope with the problem of depressive neurosis because it often produces measurable improvement by the end of the first week of therapy. In 14 double-blind studies, 339 patients with depressive neurosis received Mellaril for four weeks. In these studies, 174 patients (51.3%) improved measurably by the end of the first week, and a total of 293 (86.4%) improved during the four weeks of therapy. Furthermore, 55% of the overall improvement was observed by the end of the first week.

Mellaril usually does not cause euphoria or undue sedation and is not habituating. Patients, therefore, generally remain alert and better able to respond to therapy. (The physician should, however, caution patients against participating in activities which require complete mental alertness, e.g., driving.)

MELLARIL®
(thioridazine)

TABLETS: 10 mg, 15 mg, 25 mg, and 50 mg thioridazine HCl, U.S.P.

for the short-term treatment of moderate to marked depression with variable degrees of anxiety in patients with depressive neurosis

Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides; carefully consider benefit versus risk in less severe disorders. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy, observed primarily in patients receiving larger than recommended doses, is characterized by diminution of visual acuity, brownish coloring of vision, and impairment of night vision; the possibility of its occurrence may be reduced by remaining within recommended dosage limits. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; rarely, nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—Rare cases described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia. *Persistent Tardive Dyskinesia*—Persistent and sometimes irreversible tardive dyskinesia, characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and sometimes of extremities may occur on long-term therapy or after discontinuation of therapy, the risk being greater in elderly patients on high-dose therapy, especially females; if symptoms appear, discontinue all antipsychotic agents. Syndrome may be masked if treatment is reinstituted, dosage is increased, or antipsychotic agent is switched. Fine vermicular movements of tongue may be an early sign, and syndrome may not develop if medication is stopped at that time. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea; systemic lupus erythematosus-like syndrome.

Dosage: Dosage must be individualized according to the degree of mental and emotional disturbance, and the smallest effective dosage should be determined for each patient. In adults with depressive neurosis the usual starting dosage is 25 mg t.i.d. and the dosage ranges from 10 mg b.i.d. to q.i.d. in milder cases to 50 mg t.i.d. or q.i.d. for more severely disturbed patients; the total daily dose ranges from 20 mg to a maximum of 200 mg.

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Overview: Research on the Psychology of Women. II. Women in Families, Work, and Psychotherapy

BY ANNE M. SEIDEN, M.D.

In the first part of this overview the author reviewed research on gender differences in behavior and women's sexual and reproductive lives, and discussed the social and intellectual context of the recent knowledge explosion in women's studies. In this second part she reviews recent research on selected aspects of the social psychology of women's lives. Highlighted themes include women in relationship to family structure and child rearing, work and achievement motivation, and implications for the psychiatric treatment of women that can be drawn from the psychotherapy research literature. She briefly assesses the possible impact of research in these areas on psychiatric theory and practice.

ALL HUMAN CULTURES have some form of family or family-like grouping. In addition to "expressive" functions in living and loving, families serve multiple "instrumental" (1) purposes: to pool economic resources, support and stabilize adult personalities, and provide support in illness and disaster, as well as to share the tasks of child rearing and childhood socialization. Family and kinship networks may be built around a matrilineal or matrilocal family, patrilineal or patrilocal family, or other groupings of real or fictive kinship networks.

This paper was written at the invitation of the Editor.

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FAMILY STRUCTURE AND CHILD REARING

Recent Western culture, and particularly American culture, is relatively unique in having as the norm a small nuclear family, with few enforceable obligations resting on other kin. This nuclear family is both highly mobile (the average duration of a mortgage in the United States is said to be 4 years) and often unstable (in 1975 the divorce rate of 4.8 per 1,000 population approached almost one-half of the marriage rate of 10.0 per 1,000 [2]). The contemporary isolation of many nuclear families from the tribe or extended family, with disruption of the female-female bonding system characteristic of many primates and traditionally dwelling humans, is a relatively new characteristic of mobile industrial societies (3). Particularly new is the combination of crowding-in-isolation (that is, a nuclear family crowded into a few small rooms, coexisting with relative social isolation of a housebound mother from extended family and other familiar adults). For primary child care, contemporary American society is distinctly unusual in relying far more heavily than most cultures on mothers alone, with variable but relatively little participation by older children, husbands, or other kin (4).

The "trapped young mother" syndrome has received extensive attention in the public media, and a number of studies have found that children add stress to parents' individual or marital lives in this culture. Studies of the 1960s, reviewed by Hicks and Platt (5), found children to detract from marital satisfaction. A major recent Quality of American Life Survey (6) found a sharp difference in reported satisfaction with life as a whole between young, married, childless women (89% satisfied) and married women with young children (65% satisfied). Indicators of psychological stress were greatest for both men and women during the early parental life stage.

The apparent effects of some of the previously discussed variables on the psychology of women have

been to increase the importance of the heterosexual bond without necessarily increasing its stability, while decreasing the importance of other social bonds, such as those to kin, friends, and neighbors. The issue could be phrased as follows: one of our great national problems appears to be a maldistribution of child-care experience; some full-time housewives suffer from excessive contact with children and relative deprivation of contact with adults, while other members of our society may be virtually isolated from any meaningful contact with small children.

Day-care centers that are well run and employ adults who have chosen child care as their work have found that about 6 hours of direct child care per day is an optimal maximum (7). Full-time housewives may significantly exceed this, but by contrast, one study (8) found that a sample of middle-class husbands spent less than *one minute* per day in direct contact with their infants. This is a keenly felt deprivation for some men (9). Similarly, children in small families may grow up without any real experience in caring for younger siblings, and women whose children have left the home may mourn the total loss of child contact. Maccoby and Jacklin (10) have discussed evidence of the advantages of caring for younger children in the socialization of older children, and Goodall (11) has pointed out that some sharing of child care is common among chimpanzees, as it is in less industrialized human cultures (4).

There is a widespread belief that the structure of the American nuclear family has deteriorated. It has certainly changed. Our divorce rate is the world's highest. Although 80% of all divorced persons eventually remarry, children may spend prolonged periods of time with an overburdened single parent. In 1970 over one-fourth of American children under age 18 (and over half of our black children) were not currently living with both natural parents (12). It is estimated that by the time they reach 18, 35% to 45% of all American children will have spent an average of 5 years in a single-parent home (13). This is a sizable percentage, and it may reflect the fact that the divorced group who in a sense may need the support of a marriage most, i.e., parents of young children, may have the least opportunity to meet and bond with another spouse.

There are other striking changes in American family structure. In 1890 the average household consisted of 5 people, but in 1974 it was less than 3 due to fewer children and fewer other relatives in the home (14). Historical studies have indicated that the communally dwelling extended family was more characteristic of land-owning farm families than of urban ones (15), a condition that was in itself characteristic of a higher proportion of our population in 1890.

All of these problems are probably considerably greater in industrial society than previously because of the greater number of hazards that require close supervision of children and prevent their sharing in adult work and because of the marked increase in the length of the period of childhood dependency. Age 14, formerly the average year for entry into the adult work force, is today considered *early* adolescence—a period close to childhood during which the adolescent is often felt to require close parental supervision. The fact that we have not yet fully integrated the changed conditions over the past 100 years may represent a culture lag that is currently being addressed.

Effects on the Mental Health of Women

What effects do these unusual features of recent American family life and child-rearing conditions have on the mental health of women—and children? Much of the available data lies more in the realm of social commentary than research.

Moynihan—himself a successful product of a home broken by death—attracted considerable attention by attributing black poverty and other social ills to the prevalence of single-parent homes (15). It is true that studies of child abuse (16) and of the psychological readiness of 6-year-olds for school (17) indicate the relative vulnerability of a single adult in caring for children, particularly under conditions of poverty. (However, the critical protective factor appears to be the presence of more than one adult, not the question of whether that other adult is a father, stepfather, grandmother, or even the mother's female friend.)

Mental health statistics have shown that married women are more likely than the unmarried to seek psychiatric help (18), to attempt suicide, and, even if nonpatients, to report somatic symptoms indicative of psychological distress (19). In apparent contrast, the Quality of American Life Survey (6) reported that women as a group *exceed* men in self-reported overall life satisfaction under the following circumstances: married, aged 18–29, no children (17 percentage points greater satisfaction); never married, over 29 (12 points); never married, aged 18–29 (11 points); widowed (6 points); or married with children (3–1 points, declining as the children are younger). The greater life satisfaction of women over men thus appears to be very small for married women with children, much smaller than in other life circumstances. The possibility that even this small difference reflects defensive self-reporting is suggested by the higher incidence of suicide attempts and somatic symptoms in women compared with men in the same age range. In summary, single and widowed women report themselves as being satisfied more often than do single and widowed men; this difference increases during early marriage if there are no children but almost disappears if there are children. However, divorced women report themselves as significantly less satisfied than divorced men. Most have severe economic and emotional burdens in child rearing. Only 14% are awarded alimony, and only 44% are awarded child support. Less than one-half of these, i.e., 21% of all divorced mothers, collect child support regularly, and even then the payments are generally grossly insufficient (2).

Thus there is a striking contrast between the traditional belief that women require marriage and children

for psychological fulfillment more than men do and the evidence that marriage, and especially the child-raising period, is associated for women with less happiness, more stress, and more overt mental illness. How does one account for this contrast?

One possibility, of course, is that women have simply been "sold a bill of goods"—been raised without accurate information about the toll that marriage and child rearing may have on their lives. Another possibility is that marriage and parenthood, like other desired goals, may be *both* a genuinely desired challenge and a source of stress and therefore increased risk of impaired physical and mental health. It is certainly not unknown for people to seek other pleasures, such as smoking, skiing, or high-pressure jobs, despite their known hazards to health or happiness. The research literature attempting to quantify stress in relationship to illness has clearly suggested that positive life events may be as stressful as negative ones (20).

It is highly likely that some of the toll exerted by child rearing and perhaps marriage as well arises from intrinsic stress and lack of accurate anticipatory information, as well as from lack of economic support. This suggests that it is important for both clinicians and the population at large to have a realistic appraisal of the occupational hazards of child rearing and the need for adequate support and backup. We are not in a good position to understand and mitigate these costs if we simply deny them.

Changes in Child-Rearing Practices

A variety of approaches is currently being used to mitigate the psychological costs of child rearing, while preserving the benefits. Currently, women themselves are increasingly seeking extrafamilial employment during the child-rearing years (21) and planning on having smaller families (12). The generally low salaries received by employed women suggests that the motives for employment are not entirely economic (21).

Suggestions have been advanced for the modification of men's career patterns (9), provision of professional or neighborhood day-care homes (22), employment of "foster grandparents," and the like (23). Even the realistic appraisal of stress and symptoms as a time-limited occupational hazard, rather than necessarily evidence of personal pathology, might be expected to be beneficial. Few of these suggestions have been implemented on a large scale, and fewer still have been carefully evaluated in terms of their impact on the satisfaction and health of women, men, and children. This appears to be an important area for social-psychological and clinical research in the future.

PSYCHOLOGY OF WOMEN AT WORK AND IN THE COMMUNITY

Some of the material pertinent to this section has already been examined in the discussion of child rearing. This is appropriate, since housekeeping and child rearing are work, whether they are counted as employment or not. In addition, the burdens and satisfactions of housework and child care continue to fall more heavily on women than men, regardless of the women's employment status (24). Sometimes this is by the women's choice, sometimes it is a matter of guilt, and sometimes it reflects an unrealistic commitment to the "superwoman" role. Childhood socialization may play an important role in that the woman who has already learned how to cook, clean, and manage a household efficiently may despair of teaching those skills at a later age to a husband who has not learned them. Even women who are employed have been observed to teach household skills to and require household duties from daughters more than sons (25), a situation that is likely to perpetuate the imbalance. Perhaps all of us would enjoy the idea of having a personal servant, and to some extent, enjoying this role vicariously by performing it for others may be easier than giving it up. It is also true that in work situations there is still a pronounced trend toward failure to recognize women's real competence (26), and the maintenance of domestic competence greater than her husband's may remain a source of compensatory self-esteem for the woman employed outside the home as well as in it.

Bardwick (27) summarized evidence showing that the present cohort of middle-aged women begin to evidence increased dissatisfaction with a housewife-only role after about 10 or 15 years. Whether this length of time will continue to be salient is a matter of speculation, but current data (28) suggest a sharp increase in the number of college women with plans for little if any interruption of their careers.

At present, most adult women are employed outside the home; they constitute 40% of the paid labor force (29, p. 33). Statistically, they hold lower-status, lower-paying jobs than men do, a gap that is widening rather than narrowing (29, p. 47). This condition may pose psychological if not economic problems for the relatively affluent married woman whose husband provides support and family status. However, a substantial number of women provide total or major support for themselves and their families, if any; and another substantial portion are keenly aware of the need to have their daily activities receive social validation in terms of money and/or respect. Guilt about or pragmatic conflict between the demand of occupational roles and maternal roles sometimes poses problems for women (30). This is in large part a function of the woman's income and job status: absenteeism, including that for child-care reasons, is slightly higher among female than male employees (5.6 versus 5.5 days per year). "Quit rates" for women are higher than for men (24 per 1,000 versus 18 per 1,000) and notably so among the higher proportion of women in less skilled jobs, who lack control over their working hours and receive pay at about the same level as available surrogates (31). Of course, fathers rearing children alone have many of the same problems, and their number is increasing with the acceptance of single-parent adop-

tions and the decrease in the convention that the mother is automatically to be favored in obtaining custody after divorce.

The increasing number of women who say they are working for fulfillment rather than or in addition to economic necessity deserves serious consideration. Pay may not do much more than cover increased expenses due to employment. There are those who wonder about this trend, noting the apparently mundane character of many jobs that are taken for "fulfillment." Ultimately, this will require reexamination of our assumption that only well-paid, high-status, or influential jobs provide fulfillment. It is probably a remnant of the American upward mobility-success tradition. The need for companionship in one's daily activities is fairly widespread, as is the need for producing a tangible product, which household maintenance does not.

There is now an extensive body of work on motivation for occupational achievement in women. Horner's early studies (e.g., reference 32) suggested that some kinds of achievement that were relatively unambivalently valued by male college students were perceived as dangerous or conflictual for college women. She postulated a fear of success among bright women. A number of replications and extensions in this area have begun to tease out some of the relevant variables. For example, success motivation for competitive tasks in men tends to disappear in the absence of an audience, while the opposite appears to be true for women (33). These and other studies suggest that achieving women have learned to fear that society might punish them for that achievement, particularly if it is perceived as deviant, while achieving men have learned to expect societal reward to maintain their behavior.

The large body of literature on conditions of work for employed women and the effects of their employment and employment conditions on children has received four major fairly recent reviews (21, 34–36). The trend of this research appears to indicate that children do best overall when mothers who prefer to be housewives can be housewives and when mothers who prefer employment can have it. While earlier work had looked for and found adverse effects of employment among mothers (such as inadequate supervision, especially among poverty groups), more recent work has looked for and found both positive and adverse effects, both of which occur in interaction with other variables. For example, in one study of working-class depressed women and normal neighbor controls (37), the percentage of employment was about the same among both groups, but the depressed women were more likely to dislike and function poorly at their jobs and to have impaired relationships with their children, regardless of whether the job was that of a housewife or a paid employee. Interestingly, in another study (38), employed women recovered more quickly from depression than housewives, even when they were employed because of economic necessity. The household milieu may be understimulating for a depressed woman, even if she prefers it when not depressed.

Women's Friendships and Love Between Women

There is now a growing body of literature regarding female-to-female social networks at present and historically (39). It is interesting that much of this discussion is also relatively new. Normative social-structural models have been based on the heterosexual pair or the male-male bond as the primary units of the social structure (40). In these models female-female bonds are regarded as of secondary importance, supportive to the social structure or a way of filling in time in the absence of the "more important" heterosexual or mother-child bonds. Yet there is abundant evidence that women's friendships have always been an important part of the social fabric, relatively neglected only in early 20th-century social theory (41).

As Smith-Rosenberg (41) observed, extremely close, warm, devoted relationships between women were common in previous years and were expressed openly in affectionate correspondence that has apparently been a source of embarrassment to some modern historians. Major areas of help that women gave to each other, and continue to give, include emotional support in times of crisis or loneliness and practical help with such events of the female life cycle as birth, gynecological problems, and illness and care of the sick. There is a fairly widespread tendency to disparage the kaffeeklatsch conversation of women, but research on widowhood has disclosed that a greater number of men have intimate conversations only with their wives, while women are more likely to have a female confidante as well. The fact that the mental health and happiness of single and widowed women is generally better than that of single and widowed men has been attributed in part to the supports available from female friendships (42).

Some women who previously felt competitive or anxious with other women have cited the women's movement as providing them with significant female friendships for the first time. However, a pilot study of friendships among women active in the movement did not confirm this as a representative development (39). Most of these women had had important friendships with women all their lives; what the movement had provided in most cases was a new legitimation of the value of these friendships.

The distinction between close female friendships and lesbian relationships appears to have been confusing for many professional and popular writers. There has been a significant scotoma in both law and social science, which may have worked to the advantage of lesbians: laws against homosexual behavior have almost never been enforced against women, although there have been some recent problems concerning child custody. Smith-Rosenberg (43) noted that Victorian medical texts, fearing the imagined dangers of masturbation, noted that "some of these girls [in boarding schools] teach each other to masturbate,

and some of these women do not want to marry" without apparent awareness that "teaching each other to masturbate" referred to lesbian sexual relationships.

In fact, lesbian women make the same distinction between friends and lovers that heterosexuals do, and heterosexual women do not appear to be as confused or anxious about the distinction between close friendship and sexual intimacy as men do. "Homosexual panic" as a clinical entity appears to be far more common among men than women, although Deutsch (44) theorized that it might be a problem for widows.

Until recently, there appears to have been a relative paucity of research literature on lesbianism and an even greater neglect of what research was available. Thus Sherman (45), in a relatively comprehensive and recent text on research on the psychology of women, had no section on the topic. A bibliography from the American Psychological Association on the psychology of women (46) contains only four references to lesbianism, and only one of them is a research paper. A bibliography from the National Institute of Mental Health (47) lists only six research papers. These studies, for the most part directed at comparing the prevalence of symptoms in heterosexual and homosexual male and female samples, generally found small differences or none. (Several studies showed a slightly higher frequency of depression, drug use, or suicide attempts among homosexual populations, but a majority of the homosexuals functioned as well as the controls on the dimensions studied.)

The literature reviews that do exist (48, 49) do not include references to studies of lesbian women as mothers, which is a serious omission in view of the fact that expert testimony is often sought in child custody disputes. Recent research is filling in this gap (e.g., reference 50).

The available literature indicates that lesbians tend to have or seek lasting relationships more frequently than male homosexuals do (e.g., reference 51). One recent study comparing unmarried young lesbian women to their heterosexual counterparts (52) found that both groups had about the same percentage of transient, deepening, and cohabiting relationships expected to be permanent and about the same percentage of depression and other psychiatric symptoms. Both groups, of course, are under some similar social pressures, e.g., to marry and/or to conceal the status of their sexual relationships. The fact that these pressures are generally conceded to be considerably greater for lesbians might have predicted a greater incidence of symptoms, but this was not found.

Lesbian relationships in previously heterosexual women are beginning to receive some research attention. In some cases the women themselves regard their previous heterosexual experience as an attempt to deny a lesbian orientation that they trace to earlier years. However, there is also a distinction between "political" and "personal" lesbianism. That is, there are some women who have felt that participation in the women's movement either ideologically contradicted, or personally made difficult, relationships with men (39, 53). Confining love relationships as well as friendship relationships to women then became a political statement or a practical necessity or both.

IMPACT OF RECENT RESEARCH ON THE CLINICAL TREATMENT OF WOMEN

Depression and Schizophrenia

The literature on depression is of obvious pertinence, since a greater proportion of patients diagnosed as having overt clinical depression are women, with reported proportions varying from 2:1 to 3:1 (54, 55). Genetic research has suggested that endogenous affective disorder may be transmitted as an X-linked dominant gene, thus giving women twice the vulnerability of men (56). At the same time, ego-psychology, sociological, behavioral, and animal models converge on noting the similarity between the "learned-helplessness" model of vulnerability to depression and stereotypical female sex role expectations (57). While continued controversy in this area is likely to be with us for some time, integrative models are appearing, and the attention given to the controversy itself is likely to heighten clinical attention to diagnostic criteria. At the very least, "learned helplessness" would appear to pose special hazards to persons biologically vulnerable to depression, while exclusive attention to either social causes or their psychodynamic reflections would run the risk of ignoring biologically treatable conditions.

While schizophrenia is currently a condition that is more likely to be diagnosed in men than women, the whole subject of the true prevalence of schizophrenia is at present considerably clouded. It appears likely that in American psychiatry there has been a trend to 1) overdiagnose schizophrenia when bipolar affective disorder would now appear to be the more accurate diagnosis (58) (thus perhaps overrepresenting women among the listed hospital schizophrenic populations), and 2) diagnose schizophrenia more often in men than women, in that the marginally functioning but quiet and nonviolent schizophrenic, more often female, may never be hospitalized and thus not receive a diagnosis. (In other words, schizophrenia together with male aggressiveness may be perceived as more dangerous and therefore may be more likely to result in hospitalization.) Thus the true prevalence of the disorder in men and women is unclear and is likely to remain so for some time.

In Chesler's intriguing social-psychological model (59), depression is seen as a disorder consisting of exaggerated female sex role behavior, while schizophrenia in both sexes is seen as a disorder based on radical rejection of assigned sex roles. While the clinical observation appears accurate—schizophrenic patients of both sexes *are* frequently conflicted about gender-prescribed behaviors and even basic gender identity—I lean toward regarding this as a secondary

symptom rather than a primary one. It seems more likely that the elaboration of sex differences and roles that our society, like others, has expected at adolescence (a time at which many schizophrenics begin to experience especially severe difficulties) is sufficiently complex and unrealistic enough to make it harder for a person with a basic schizophrenic thought disorder to navigate the course. If this is true, relaxation of sex role rigidities would not be expected to reduce the true prevalence of schizophrenia, but it might have the important effect of decreasing the magnitude of the adaptive task for schizophrenics (and others).

Psychotherapy Research

The field of psychotherapy research is enormous, complex, and fascinating. Probably the most solid finding in the entire body of work is one that is frequently ignored because it is, of course, threatening to us as clinicians: psychotherapy has the potential for accelerating deterioration as well as producing beneficial effects under certain conditions that are not entirely understood (60, pp. 246–252; 61). While this is what one would expect of any powerful therapeutic agent, we have been hampered in applying appropriate cautions by a relative lack of solid data about specific therapeutic conditions that should be cause for concern. Current feminist work may be helpful in bringing the question of adverse effects back into the central focus that it deserves. Specific criticism by feminists has highlighted the following areas (also noted by others):

1. Sexual abuse of the therapeutic relationship is more common, and at least sometimes more devastating, than has previously been recognized (61). Problems in this area may be further compounded by the therapist's use of overt or covert threats of various sorts to prevent disclosure (62, 63).

2. The perhaps more subtle but related danger is that the therapeutic relationship in a dyad may replicate rather than remedy the "one-down" position in which women frequently find themselves in life and marriage, thus encouraging the fantasy that an idealized relationship with a more powerful other is a better solution to life problems than taking autonomous action (59).

3. Therapeutic theories have more often supported rather than questioned stereotypical assumptions about sex roles, with different standards of mental health for women and men (64), including the assumption that dependency, masochism, and passivity are normal for women and the tendency to treat assertiveness and aggression differently for women than for men.

4. Women specifically, especially when treated as collaterals to their children, may be harmed by a "blame-the-mother" tradition in clinical psychopathology (vide the considerably greater and earlier literature on allegedly schizophrenogenic mothers than fathers, despite the lack of clear evidence that either is specifically responsible for the more serious disorders of their children).

5. There has been a lack of realistic appraisals of the occupational hazards of the housewife role.

Special Issues Related to the Gender of the Therapist

While therapist gender is often considered in making an assignment of clinic patients, there are relatively few solid data on differential outcomes by diagnosis and other patient characteristics. Luborsky and associates (65) found that in dynamic psychotherapy, favorable outcomes were more often obtained when the therapist and patient resembled each other in terms of *all* measured demographic variables (including gender, age, marital status, religion, and social class origin). Orlinsky and Howard (66, 67), reanalyzing data from the 1960s, were able to make more precise recommendations for female patients. They found that having a female therapist was more likely to predict a successful outcome for women patients as a group but that most of the variance was accounted for by women who 1) were relatively young and unattached (i.e., not married or mothers), and 2) had a diagnosis of depression. In this age-diagnostic group they found that with male therapists, more time was spent talking about the therapeutic relationship itself, including erotic transference, but that female therapists were more likely to be perceived as supportive and helpful and were more often associated with overall patient satisfaction. For women in other life-status and diagnostic groups, these differences between male and female therapists were less pronounced.

It has been argued, quite possibly with some merit, that the gender of the therapist is less important in psychoanalysis than in therapies of lesser intensity and extensiveness. This argument states that there is time and scope in an analysis for the development and resolution of both maternal and paternal transferences, regardless of the therapists' and patients' actual genders. Even assuming its validity, the argument would be more persuasive to analysts who hold that the formation and resolution of transference neurosis alone is the effective ingredient in analysis; it would be less persuasive to those who hold that corrective emotional experiences, or provision of role models, are also important ingredients. Actual data on differential outcome are relatively rare.

Regardless of the ultimate preference that different kinds of female patients have for a therapist of the one or the other gender, there are a few issues in therapist training that are likely to have a special impact on the work of female and male therapists with female patients.

Female therapists are much less likely to have had as many supervisors of their own sex as role models during training; some may have had none (68). In this regard they may be more likely to have experienced conflict between their therapist identity and their own gender identity. If this issue is worked through it is likely to have been perceived as a source of professional growth (69), but if it is denied there may be special problems in identifying with less privileged wom-

en. The conscious or unconscious position that "there is no problem; if I could succeed so can you" can be a bar to empathy, as can a countertransference position of pleasure at seeing women like those who in high school belonged to a popular social set now developing problems that the therapist—perhaps a "grind" in high school—now escapes (70). In addition, perhaps because of a relative lack of female supervisors, and perhaps because of a general cultural denial of women's homosexual feelings, homoerotic transference issues may have been less carefully dealt with in the supervision of female therapists with female patients.

Male therapists are likely to share in the dearth of female supervisors and therefore have more learning experience in the discussion of women's difficulties from a male perspective than from a female perspective, where these perspectives differ. Androcentric bias in the male therapist ("male chauvinism") is probably less likely to have been corrected in professional training than gynecocentric bias in female therapists, who generally receive extensive exposure to male psychiatric points of view. Erotic transference cuts both ways in the male therapists' treatment of female patients: it may provide for a more rapid mobilization of interest in the therapeutic relationship and may provide either gratification or anxiety for the male therapist, but he is likely to receive supervisory help in that male supervisors have generally shared this experience. Since the female patient and male therapist (like most persons) are more likely to have had a closer early relationship with their own mothers than their fathers, collaboration in a mutual recognition of anger at the mother and their problems with her may speed the reevocation of oedipal feelings but slow the resolution of them.

None of these problems is by any means insuperable, but more explicit recognition of them in training and the provision of supervisors of both sexes for work with patients of both sexes is likely to be helpful.

For all therapists, it is likely that changing roles and expectations of women and men are likely to bring new issues in this area into focus in treatment over the next few years. Further, therapists of both genders may well find that gender-specific transference and countertransference issues that they learned to recognize and handle during training may change over the life cycle as the therapist's own age, marital status or satisfaction, and life circumstances change. Continuing education and occasional consultation may be very helpful in keeping up with both the changing times and the therapist's own changing experience of these issues.

Effects of the Women's Movement on Clinical Treatment

Data on the effects of participation in feminist activities on the mental health or psychological organization of women are thus far sparse and largely anecdotal. Some individual women speak with great enthusiasm of their own gains from participation in the movement, indicating at the very least a charismatic effect of the sort that Vaillant (71) recommended as an alternative treatment modality. Bernardez-Bonesatti (72) showed that there were differences between feminist and nonfeminist applicants for outpatient psychotherapy, with feminists showing less passivity and greater self-esteem.

Feminist therapy, even when provided by well-qualified professionals, has attracted some degree of suspicion regarding both its clientele and the therapy itself (73). While suspicion within the women's movement centers on the motives for a therapist's willingness to take an elite position and charge a substantial fee, suspicion from the professional side is more diffuse. At a recent annual meeting of the American Psychiatric Association, in a session on feminist therapy, two psychiatrists in widely different parts of the country described their male colleagues' apparent anxiety at the idea of all-women therapy groups (74, 75), despite the fact that same-sex therapy groups have been widely used for other groups such as prisoners, the clergy, and adolescents. Economic issues may be one explanation; in major metropolitan areas female psychiatrists currently report that they have insufficient time to accept all their referrals at a time when some male psychiatrists are having difficulty filling their schedules. Feminist therapists have reported their experience in successfully treating women who felt that they had prior treatment failures with nonfeminist therapists, and the reverse also occurs (76).

At present, feminist therapy has some of the characteristics of a "school" of psychotherapy, although, of course, many members are also adherents of other therapeutic schools or of informed eclecticism. Feminist therapy has its own rosters of therapists, body of research and clinical literature, and special sessions at major meetings of mental health professionals.

Major trends in feminist therapy appear to include a grounding in current research about women, a relative priority given to environmental interpretations rather than intrapsychic ones, and a trend toward greater egalitarianism between therapist and patient. Other characteristic trends include a careful avoidance of using the therapeutic situation to replicate the one-down position that women often take in marriage or work, a hearty laugh at the idea that a healthy woman is characterized by passivity, and an attempt to provide a good role model in the form of a competent woman. None of these characteristics taken individually distinguishes feminist therapy from all other schools, but the constellation apparently is either unique enough, or perceived as unique enough, to have created a demand.

There are, of course, risks. For example, the previously reviewed literature on the "fear of achievement" suggests a prevalence of internalized conflict about achievement among many able women with achievement goals. In therapy a total neglect of internal conflict might lead to ineffective therapy in these and other areas. There is a further risk in that feminist

patients are no more immune to organically determined disorders than are other people, and thus far a majority of feminist therapists are not psychiatrists. For example, a woman with a genuine bipolar affective disorder, who needs pharmacological as well as psychotherapeutic help, may have difficulty in finding a therapist who is both a pharmacologically competent psychiatrist and a feminist, or a psychiatrist who is willing to collaborate with a feminist therapist.

DISCUSSION

It should be clear from this overview that we now have available a large body of recent and important research data on women that must be sifted, evaluated, and fed into the development of appropriate theory about women. This paper is intended to be a step in that direction, but one that is necessarily preliminary at this time. Since the body of research referred to has largely been produced within the last decade, much of it during the early 1970s, it appears unlikely that we will have a body of studies that have been replicated, critically reviewed, and assimilated into the field before the next decade. In the meantime there will be a considerable need for psychiatric researchers (and, of course, researchers in related fields) who possess a diverse repertoire of research skills and familiarity with the literature in this field. Urgently needed will be women's studies scholars who cross disciplinary lines, e.g., having *both* clinical experience and knowledge of historical, anthropological, sociological, or psychometric methodologies.

Importance of Recent Research to Psychiatry

There appears to be considerable potential for an exciting enrichment of general psychiatric theory, research, and practice. For example, in a fairly recent review of psychiatric research during the period 1963–1972, Brodie and Sabshin (77) reached the following conclusions, among others:

> One of the striking findings of this survey involves the paucity of papers on the social causes of psychiatric illness. Social psychiatric concepts had produced important formulations about etiology during the 1950s . . . [78, 79], and by the beginning of the 1960s it appeared that we were on the verge of developing new constructs to account for social factors in psychopathology. Quite clearly, these new constructs have not emerged between 1963 and 1972 and this void may represent a significant commentary on the past decade. (p. 1316)

There are a number of reasons for believing that research in the area reviewed here may contribute in the future to the breakthrough that Brodie and Sabshin had anticipated but did not find in the 1960s or the early 1970s.

1. The implications of sex-role typecasting for psychopathology or symptom expression are just beginning to be plumbed. As Dohrenwend and Dohrenwend noted in a comprehensive review of the influence of social and cultural factors on psychopathology (19), it has been difficult to compare the major psychiatric epidemiological studies. Major questions of theory, which in some instances could turn on questions of fact, have been left unresolved because of methodological problems. These problems include overlooking sex-role differences. For example, women are consistently shown as more likely to be diagnosed as neurotic, and men as sociopathic. But whether sociopathy is considered to be "mental illness" varies so greatly from study to study as to make results noncomparable. Widely used symptom scales, such as the 22-item screening instrument from the Midtown Manhattan study (80), "are more representative of female than male modes of expressing distress" (19). Clearly, before the complex literature on social causes can be sufficiently clarified to yield grounded theory, it will be essential to give the kind of careful attention to sex differences that has been characteristic of the current work. This will involve carefully looking for sex differences and attempting to pin down their sources rather than using stereotyped explanations, as well as giving careful scrutiny to alleged sex differences to see whether the data really support their existence.

2. The current research includes much work on the distinctive events of the female life cycle, such as the biopsychological and sociopsychological aspects of menarche, sexual relationships, childbirth, lactation, early mother-infant bonding, and menopause. This is studied in relationship to other events of the female life cycle that are not uniquely female, such as education, employment, child care, adaptation to illness, bereavement, and aging. Although many of these topics have been studied in previous research, we have had surprisingly little integrative work uniting them. The newer work will be important both in understanding the etiology and pathogenesis of psychological distress in women and in understanding women's participation in social networks that alleviate or exacerbate psychological distress in others.

3. For the first time we have a large number of well-trained investigators who are doing research on women and who are women themselves and have experienced a number of the life events under study. The issue is similar to that regarding studies of other minority groups; while no one would be likely to make a convincing argument that *all* of the research about a particular minority group should be done by members of that group, there are compelling reasons why *much* of it should be (81). Researchers from a privileged group outside the group being studied are at risk of having shallow conceptualizations, lack of empathic understanding of the salient variables, and perhaps a different axe to grind. Further, there has been a strong criticism that research done from the "outside" is not as likely to be conceived or later used in a way that benefits the people "inside" the group in question. A persistent concern in psychiatric research related to social problems has been the considerable gap between

research and application. Sometimes the gap may occur because the investigators themselves are not particularly interested in implementation and sometimes because the research is too poorly conceived to merit application. The infusion of numbers of investigators who belong to the group whose ox is being gored is probably the best remedy to this situation, and it can be expected to result in better research and quicker dissemination and application of findings.

4. It is even possible that the current increase in the number of women entering medicine and psychiatry, and the rapid expansion of women's studies as a related research field, may yet contribute to the hoped-for transformation of psychiatry into a more research-oriented field (82, 83). This appears to have already occurred within the field of psychology, where the great discrepancies between what women have experienced for themselves and what psychological theories say about women have acted as a powerful stimulus to research curiosity. Women who are learning not to accept an argument from authority when it refers to women, who are learning to demand to see the evidence and review and gather it for themselves may, it is hoped, continue to carry these healthy attitudes over into other areas of psychiatry. The result could only be stimulating and beneficial for our field and all of us.

Before about 1970 we saw such remarkable phenomena as an APA Task Force on Psychiatric Aspects of Family Planning that had no women members (84) and the official APA journal that published papers dealing with issues affecting women's lives, such as psychotherapy, family life, abortion, and early child care, but had no women on its editorial board (85). In addition, the published proceedings of a conference sponsored by the National Institute of Health on menopause and aging listed 25 participants, all men (86); clinicians who primarily treated female patients were without formal education or background in women's perceptions of treatment issues; and research site visit committees and review panels often contained no women members. There has been a kind of (often unconscious) arrogance in the willingness of male professionals to tell women how to define their problems and lead their lives and, in parallel, a curious willingness of women to accept male definitions of women's needs. However, today's climate contains some important differences. Since 1967 women have not only had legal rights of equal access to professional education and advancement, but have increasingly felt a sense of responsibility for taking part in the groups and deliberations that define women, whether in research or in clinical treatment.

"Psychology of Women"

"Psychology of women" is a complex concept. The topics previously discussed all pertain to women, but to consider them as constituting a subfield of psychology or psychiatry poses serious theoretical problems. As noted by Parlee (87) in a sophisticated review of issues and research in this area, the term "psychology of women" implies that psychology needs a special set of laws and theories to account for the behavior of women. "The bland assumption that males are more representative of the human race than are females may have created an unknown number of pseudoproblems for psychologists" (87, p. 127). This includes both the failure to detect important and interesting sex differences when they do exist and the failure to refute assumptions about sex differences when they do not exist.

Women are less often subjects in psychological research than are men (88–96). Indeed, in a review of psychological journals one investigator found that female authors were more likely than male authors to have analyzed their data for the presence or absence of sex differences (96). In addition, the question of whether women or men serve as subjects of an experiment tends to depend to some extent on the problem being studied, i.e., studies of aggression are more likely to use only men, while studies of interpersonal attraction contain a higher proportion of female subjects than studies of aggression do. Further, studies are frequently reported and summarized in such a way that findings from those studies conducted on men are generalized to everyone, while results from studies employing women are generalized only to other women.

Generally held assumptions about sex roles or sex differences are often introduced into what purports to be scientific work without the perceived need for supporting evidence. For example, a book reporting clinical research on environmental effects on behavior disorders (97) listed failure to cook her husband's breakfast as ipso facto evidence of pathology in a female patient!

Research findings are likely to be reported or abstracted in biased ways. Male-normative linguistic habits are common and revealing as, for example, in the use of the term "superior" for higher scores by men when "scored higher" was used for higher scores by women (87). It is conventional in research as well as in clinical settings to use generic male terms to refer to persons of both sexes or to positions that could be filled by persons of either sex (e.g., "man and his cities," "chairman" rather than "chair" or "chairperson," and "attending man" for "attending physician"). Available research data (98, 99) indicate that these are not merely neutral linguistic conventions but do have the expected effect of inducing the reader to expect the positions to be filled by a man.

Beyond the use of language there is the problem of inaccurate and/or misleading references to primary data (including the investigator's own data). For example, Asch (100), in discussing the mental and emotional problems of pregnancy, stated that "problems about eating are deeply rooted in the psychology of the pregnant woman" and then cited data that appear to support the opposite conclusion, i.e., an extreme emphasis by clinic staff on avoiding weight gain had been transmitted to patients (avoiding weight gain is now known to be obstetrically contraindicated). Many au-

thors have cited Spitz's (101) and Bowlby's (102) work as shedding light on *maternal* deprivation alone, whereas reading the original reports suggests that sensory and social deprivation were major issues.

Indeed, findings are likely to be explained in stereotyped ways even when support is available for alternative explanations. For example, one study (103) ascribed female toddlers' staying closer to their mother than did male toddlers to "timidity," just one page after noting that mothers had reinforced proximity-seeking in girls while more frequently ignoring it in boys.

Clearly, major biases such as these in the conduct and interpretation of research do not arise by unmotivated accident. An objective and value-free science is a goal rather than something to be consistently expected in real life. Current thinking in the philosophy of science (104), sociology of knowledge (105), and the psychology of effects of expectancy (106) reconfirm our recognition that almost all knowledge has its political and wish-fulfilling contexts. The same point has been made with respect to clinical practice (107, 108). Psychological data about women can be gathered or used in quite different ways, depending on what one wishes to do about women. Henley (109) made a distinction between "psychology of women," "psychology against women," and "psychology for women," pointing to the ways in which data about women can be gathered and used to stereotype women, to "put women in their place," or to be helpful to women.

Literature on the "psychology of oppression" (110, 111) arises from noting the similarity between stereotypical views of women and stereotypical views of other disadvantaged (but sometimes ambivalently envied) groups. Thus women, like blacks, have been described as "inconsistent, emotionally unstable, lacking in a strong superego, weaker or less often healthy, artistic rather than conceptual, nurturant rather than productive, intuitive rather than intelligent . . . if she knows her place she is really a quite lovable and loving creature, happy and childlike" (112, p. 81). Similarly, women are said to be more manipulative, devious, inscrutable, and erratic; it has been accurately pointed out that these are characteristics to be expected from any group that has access to power and economic support only by means of pleasing another, dominant group. An accurate analysis of such stereotypy requires recognition of both true difference (reflecting different coping mechanisms) and perceived but untrue differences (arising from observer bias, lack of knowledge, and/or projective mechanisms).

By contrast, literature on the "psychology of gender roles" arises from noting that there is a division of labor in most human societies which rests in part on reproductive biology and in part on cultural elaboration of the consequences of biological differences. Women are expected to give birth, rear children, feed people, and perform other tasks that a society views as consistent with these responsibilities (whether the individual woman has children or not). Men are expected to perform the residual tasks. Female gender role behavior may then be seen as more firmly grounded in biology (113), with more clarity and "inevitability" or "rightness" attached to it. Male gender role behavior correspondingly is seen as less certain and clear, less biosocially predictable, more subject to change according to social circumstances, more a product of culture, more an achieved than an ascribed status, and perhaps thus for the individual male more of a source of uncertainty, anxiety, and confusion (113, 114).

The role differences between the sexes are often sharply contrasted, often at the price of oversimplification, in the hope of making life simpler or more comprehensible. Clearly defined status and gender roles, where everyone "knows his or her place," are said to be one of the advantages of stratified societies, even when rigid roles result in inequity or blurring of individual differences. On the other hand, fear or envy of prerogatives of the opposite sex, or aggressive or defensive behavior against the opposite sex, is so common as to have received a special term—"the battle of the sexes." There is in fact a long and remarkable tradition of misogynous writings, both scientific and literary, reflecting the fear of women or women's sexuality. This literature has been historically documented by Hays (115), Lederer (116), Rheingold (117), Sherfey (118), Bachofen (119), and others. An attempt to reverse these biases and traditions would constitute a genuine and important scientific revolution.

Scientific revolutions are often, at the beginning, more conceptual than empirical; a new point of view often reorganizes old data before it stimulates the search for new data. The new point of view surfaces in a particular context of scientific and/or political crisis (104) (it is rarely as new as it later appears [120]). It may stimulate anxiety, opposition, and blind discipleship quite as much as it does the objective search for facts.

Thus it has been observed that there were particular resistances to assimilating the work of Copernicus, Darwin, and Freud. The heliocentric model removes our earth from the center of the universe. Evolution makes "man" no longer the species uniquely created to govern this earth. The dynamic unconscious makes "man's" conscious motivation no longer master in "his" own soul.

In this sense the feminist perspective also appears to imply a genuine revolution in social psychology. Man—the male half of the species—is no longer to be viewed as its prototypical member, with female psychology the psychology of the "other," the exception, the supporting cast. In my opinion, the implications of this different perspective will ultimately go far beyond the simple accumulation and assimilation of new data about women.

Directions and Expected Impact of Future Research

We may expect that some applications of some of the current work may be made in ways that in retro-

spect will appear to have been unnecessary or misguided. In particular, the current controversies among biological, social, behavioral, and intrapsychic approaches may be expected to yield, to some degree, to more integrative approaches.

Over the next decade we may expect to see a sustained increase in the number of women involved in psychiatrically related research, as well as research administration and evaluation, thus participating more equally in choosing the topics and determining what studies receive funding.

We should also expect a continued growth in research attention to areas particularly bearing on women's lives. We may hope to see clinical practice related to such areas as women's biosocial psychology, childbirth, childbearing, vocational issues, and marital relationships to be increasingly based on solid research findings rather than the translation into professional language of what is essentially folklore. Appropriate revision of theory should help to increase the sensitivity of our third ears. Better attention to the mental health needs of boys and the effective management of male—and female—aggression in a civilized society may be important aspects of meeting the needs of women and society as a whole.

Until a short time ago it appeared to many that the continued expansion of our industrial society might make the conquest of leisure, and leisure-time personal relationships, the largest social problems for the future. Current ecological and energy crises have clarified some of the limitations of these approaches (121). The "greening of America" (122) no longer appears to be an unlimited, automatic next step. It appears that work will continue to be an important part of the lives of women and men, and the appropriate balancing of work and achievement needs, as well as other personal human needs, will be important issues affecting everyone. This will inevitably be reflected in psychological theory and research and in clinical practice.

"Futurology" is becoming something of a specialty in itself. By definition it is an extrapolation from present research rather than a research field itself. It seems a safe extrapolation to predict a continued advance in the area of women's studies and a greatly increased impact on psychiatry in the near future. This field is so new that we do not as yet have any psychiatric residents who could have had four years of exposure to it as college undergraduates, but the first of that group is now in medical school, and they will be just beginning to enter our residencies in 1978. It should be an interesting decade ahead for all of us.

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The Functions and Regulation of the Arousal of Anger

BY RAYMOND W. NOVACO, PH.D.

Anger is paradoxically one of the most talked about but least studied of human emotions. The author presents a model of anger arousal that emphasizes the adaptive as well as the maladaptive roles of anger in terms of the diverse functions anger serves in affecting behavior. In light of the fact that competence in anger management involves dealing with stress situations that require patience, composure, and constructive thought for their resolution, he discusses cognitive self-control processes affecting the regulation of anger.

THERE IS WIDESPREAD CONCERN today about forms of psychosocial stress. As economic frustrations, political mischief, and environmental impairment increase, the arousal of anger is correspondingly found to be a more customary coping response. However, anger, although one of the most talked about human emotions, is the least studied. Aggression and violence have been prominent topics in behavioral research, but anger arousal has received considerably less attention. As Rothenberg (1) stated, "Almost invariably, anger has not been considered an independent topic worthy of direct investigation but has been subsumed under a general category such as aggression, emotion, or affect."

The arousal of anger, in an elementary sense, can be viewed as an emotional response to provocation that has identifiable autonomic (2), central nervous system (3, 4), and cognitive (5–7) components. Whether or not anger leads to aggressive behavior depends on the magnitude and appraisal of the provocation, situational constraints, expected outcomes, and the person's preferred style of coping. Although the physiological characteristics of anger are of important theoretical concern, anger will be discussed in this paper as a subjective affect. In an effort to further the investigation of anger, a functional model of anger arousal will be presented along with a discussion of cognitive processes that have an effect on anger regulation.

There has been some discussion as to whether anger is a primary or a secondary emotion. Because anger has been shown to arise in response to ego threat or insecurity, anxiety is claimed as the more basic emotion (1, 8, 9). In discussing parent-child relationships, Gordon (8) asserted that anger is an emotion that is manufactured by the parent as a consequence of primary feelings such as fear, embarrassment, or disappointment.

The question of whether anger is a primary emotion or an emotion secondary to anxiety is largely a pseudoproblem. The arousal of anxiety is at times undoubtedly associated with the arousal of anger. Fear stimuli elicit anger as a defense, but whether this is exclusively the case is unfounded in evidence or theory. The functional model presented below accounts for the defensive role of anger as well as a related potentiating function whereby anger serves as a means to induce the experience of personal control.

The relationship between the arousal of anxiety and the arousal of anger is by no means a simple one. Cognitive and contextual factors are important determinants of how emotional arousal is experienced and labeled. Lazarus (5) argued that one's response to threat is largely determined by cognitive appraisal. This was reflected in Schacter and Singer's classic experiment (6), which demonstrated that information and social circumstances affect whether arousal is labeled as anger. Rational-emotive therapy (10), Meichenbaum's procedures for anxiety-based problems (11), and my own procedures for chronic anger problems (7) are each predicated on the idea that emotional states are defined or determined by one's cognitive structuring of a situation.

Provocation experiences consist of interrelated, sequential components. Although anger as an affective state is distinct from aggressive behavior, the experience of anger is nonetheless influenced by the course of action taken in response to provocation. According to the James-Lange theory (12), the emotion that one experiences is a function of one's overt behavior in the situation. Arousal will more probably be construed as anxiety if the person withdraws from or avoids the provocation and as anger if he or she challenges or approaches. In another sense, whether one experiences anxiety or anger is a function of one's coercive power relative to the provoking person. As the perception of personal control diminishes, the arousal of anxiety during a provocation has an increased probability. Indeed, as the presentation below stipulates, the arousal of anger can be evoked to generate a sense of personal control.

The common confusion of anger with aggression and hostility has blurred the recognition of anger's adaptive functions. The consequence is that anger is equated with destructive forces. In the model of anger

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arousal presented here, the energizing, expressive, discriminative, and potentiating functions make it clear that anger can have very beneficial effects.

ANALYSIS OF ANGER FUNCTIONS

Paradoxically, anger is both satisfying and frightening. Although anger is often thought of as something to be controlled, one difficulty in the treatment of persons with chronic anger problems is that they may enjoy getting angry. Although our anxieties about anger arousal follow from expectations of subsequent aggression or of social censure, the satisfaction associated with anger derives from the fact that anger serves important positive functions in coping with stress.

Energizing Functions

One of the most recognizable functions of anger arousal is that it energizes our behavior. Anger increases the vigor with which we act. This can result in strong motor responses, such as slamming doors or raising the volume of one's voice. This energizing effect can also enable a person to assertively confront provocation or injustice. Nearly all social movements have anger as a driving force for efforts at social change. Certainly there is no other emotion that better characterizes the women's movement for equal rights. The Chinese word for anger is *sheng ch'i*, meaning to produce one's *ch'i*, which is the word for energy.

Disruptive Functions

However, as an arousal state that raises the amplitude of response systems, anger can have a disruptive effect on behavior. When arousal is high, anger interferes with efficient task performance. Cognitive processes become disorganized, and reactions become impulsive. A child-abusing parent, for example, will be irritated by some behavior of the child, fail to understand the situation in terms of age-appropriate behavior, and overreact with physical force. When people are agitated, they often act before they think. Competence in anger management represents personal effectiveness in dealing with stress situations that require patience, composure, and constructive thought for their resolution.

Expressive Functions

It is well known to marital counselors that anger serves important expressive or communicative functions (1, 13). Frustrated expectations lead to smoldering anger, which disrupts intimate relationships. A healthy relationship depends on the ability of partners to express anger and give one another negative feedback. Some problems never reach the discussion stage until one member of the relationship becomes demonstrably angry. Bach and Wyden (13) addressed these problems in communication between intimates and developed a system that trains lovers to be effective fighters. Interpersonal problems arise from the manner in which people express their anger or what they do when becoming angry. Because of anger's disruptive components, people often need help in expressing negative feelings in a way that will resolve conflict rather than merely escalate a sequence of antagonism.

Self-Promotional Functions

A more subtle form of social communication consists of impression management. The irascible individual is a master of dramaturgy in the presentation of self. Goffman's thesis (14) is that when a person is in the presence of others he will organize his actions in such a way that they convey an impression of himself that is in his interest to convey. In this context, anger arousal has a self-promotional function. When one is thwarted or stressed, it is often preferable to take the role of an angry, agitated person rather than to be seen as someone who is anxious, apprehensive, or apathetic.

As a performer, the angry person is claiming qualities and attributes that are socially valued. The demonstration of anger advertises potency, expressiveness, and determination. Although someone's manner may be truculent and thereby looked on with disdain, he or she is nonetheless defining or even demanding how others are to relate to him or her. The demonstration of anger can thus be seen as a strategic move to foster and protect one's public image. A prototypical case is the pronounced indignation of a public official in addressing matters of consequence.

Among the character types discussed by Toch in the classification of violent personalities (15) are individuals who use self-preserving strategies to enhance their image in the eyes of others. Just as proneness to aggressive behavior can be seen in terms of a concerted effort at building a reputation, the demonstration of anger can be seen as an orchestration to promote an impression of oneself to a particular audience. When one's manner of expression is eruptive, the impression of a volatile individual who should be kept at arm's length is fostered. A performance of suppressed rage with some telltale signs of annoyance invites antagonism that can then be used against the other person. In contrast, the demonstration of anger that addresses issues and tasks rather than attacks another's self-worth pulls for a response that can lead to constructive resolution of conflict.

Defensive Functions

As suggested earlier, anxiety is implicated in the arousal of anger. Its involvement can be fruitfully understood in terms of a defensive function. "Defensive" here refers to ego defense, whereby anger occurs as a not-so-necessary protective reaction to feelings of vulnerability. Anxious feelings of vulnerability are short-circuited or preempted by the arousal of anger. It is less distressing to be angry than to be anxious. Anger externalizes the conflict by directing attention to something that is nonself: "There is nothing wrong with me; there is something wrong with you."

Clinical observations in the interactional arena of psychotherapy have recognized this role of anger. Sullivan (16) remarked on this defensive process:

> Thus when another person seems annoyed or angry, we are most likely to approach a simple understanding of the situation if we ask ourselves whether what we did had in some way impaired his security, so that the anger was called out merely as an avoidance of the anxiety that would otherwise have been aroused. . . . Anger blunts the feeling of personal insecurity (p. 96).

On a larger social scale, Halleck (17) claimed that people use violence to combat or prevent feelings of helplessness from reaching levels of conscious awareness.

Potentiating Functions

Closely related to the defensive role of anger is the extent to which it potentiates a sense of personal control or of being in charge of a situation. Anger arousal induces a sense of potency. The relevance of belief in personal control to psychopathology, accommodation to stress, and psychotherapy has been well documented and reviewed by Lefcourt (18, 19). Correspondingly, anger can be more effectively regulated if one perceives himself or herself as competent to handle provocation (7).

The anger that is observed among ardent members of social movements develops as a reaction to the experience of powerlessness and results in the mobilization of resources. As one begins to see his or her social status in terms of oppressive social forces rather than in terms of personal and moral weakness, alienation is transformed into anger. This conversion of affect can facilitate the attainment of personal goals and even social change. As Melges and Harris (20) stated, "The feeling that one has little control over his own destiny may lead to attempts to restore oneself as an active agent. This may involve attacking those who appear to be influencing and controlling the individual."

To the extent that anger arousal directs us toward constructive action and problem resolution, its adaptive value in this potentiating role is transparent. The danger is that anger is sometimes aroused in a blind effort to assert with force. As Rothenberg stated (1), "If we think of hitting someone or even killing someone, we feel far more powerful and in control of the situation than if we think of fleeing or doing nothing." Psychotherapy for chronic anger must therefore impart to the client a set of nonantagonistic skills for coping with provocation.

Instigative Functions

As an emotional response to provocation, the arousal of anger and the cognitive processes associated with that arousal (i.e., thoughts about the provoking person and the thwarting situation) can instigate aggressive actions. The admixture of agitation, thwarted expectations, and hostile internal dialogue serves as a cumulative stimulus for aggressive behavior. There is a learned connection between anger and aggression. An aggressive act is expected to change the situation or conditions that have provoked anger. Experimental studies of aggression in laboratory settings standardly use this function of anger; insult conditions are manipulated to elicit aggressive acts by the subject.

Discriminative Functions

Although the arousal of anger constitutes a state of agitation or tension, awareness of anger can be trained to function as a discriminative cue. Attunement to the signs of anger can alert one to the psychological significance of a situation and serve as a cue to use coping strategies that will be effective in resolving conflict. The concept of affect as a signal has been part of psychoanalytic theory, but this idea is more often applied to the emotion of anxiety. In a previous study (7) clients were trained to use anger as a cue for nonantagonistic coping strategies. This signal function of anger has also been discussed by Melges and Harris as part of a cybernetic model (20) and by Solomon in recommending mechanisms for the control of hostility (21).

THE REGULATION OF ANGER

Virtually every form of psychotherapy that construes behavior in terms of dynamic processes has emphasized the recognition and expression of affect. The underexpression of anger has also been a focal concern of assertion training (22), which has blossomed in popularity among behavior therapists.

Although suppressed anger is easily addressed by a variety of psychotherapies, the overexpression of anger has been a more refractory problem. Reich's concept of character armor (23) is indeed applicable to chronically angry and assaultive persons, who have typically been among the most difficult of clinical populations. The classic treatment of this population has consisted of facilitating increased ego controls. For example, Redl and Wineman's work with "children who hate" (24, 25) was directed toward the improvement of frustration tolerance, impulse control, the capacity to love, and self-corrective mechanisms.

Recently, I demonstrated that cognitive self-control procedures can be designed to regulate anger arousal (7). Cognitive coping procedures were particularly effective when combined with training in relaxation. The cognitive coping skills involved in the treatment of chronic anger consisted of the following: 1) education about personal anger patterns, 2) self-monitoring of anger arousal and its cognitive companions, 3) the ability to alternatively construe provocation, 4) covert self-instruction to guide one's appraisal of events and to cue nonantagonistic responses, and 5) the ability to remain task oriented rather than ego oriented when provoked. These interventions were designed to impart a sense of personal control in the management of provocation.

The basic steps in the method of treatment consisted of cognitive preparation, skill acquisition and rehearsal, and application of coping techniques. It is similar to a procedure called "stress inoculation" that Meichenbaum and Cameron applied to anxiety problems (26).

Cognitive Preparation

Beginning with an extensive discussion of personal anger patterns, a situation analysis of proneness to provocation was obtained. Clients were asked to keep a diary of their anger experiences. This enabled them to develop self-monitoring skills and to assess the relative magnitude of anger reactions. The influence of cognitive processes on emotional arousal was stressed, and emphasis was placed on perceived threat to self-worth, wanting to be in control of a situation, and acts of antagonism that escalate the anger episode. Clients were directed to become aware of anger-instigating thoughts as well as the somatic tension often associated with provocation. Because tension and relaxation are incompatible, learning to relax was presented as a way to regulate anger.

Skill Acquisition and Rehearsal

Clients were encouraged to discriminate circumstances for which anger is justified from those for which it is less desirable and even harmful. As in rational-emotive therapy (10), they were reminded that it is not events themselves that provoke anger but their constructions and beliefs about those events. As a way to change their cognitive templates of provocation, they were provided with a package of self-statements that would facilitate anger regulation. This set of self-statements was designed so that it could be applied to provocation experiences when viewed as a sequence of specified stages. The cognitive procedures thus allow for self-controlled intervention at various points of the provocation sequence.

One of the most effective ingredients of the treatment program was learning how to remain task oriented or problem focused in an anger-arousing situation. Becoming task oriented has several adaptive effects in the face of provocation: 1) the person begins to define the situation in terms of a problem that calls for a solution instead of a threat that calls for attack, 2) by attending to the issues of an argument, the person avoids responding in ways that escalate the anger sequence, and 3) by focusing on the issue or task, the person directs his attention away from internal stimuli (cognitive and physiological) that are associated with anger. As a complement to the cognitive techniques, clients were instructed in relaxation skills using the Jacobsen method of systematically tensing and relaxing a series of muscle groups (27). Various forms of mental imagery and additional emphasis on breathing techniques were used to assist relaxation induction.

Practice and Application

The practice of coping techniques was achieved by using a hierarchy of provocation items prepared by each client. The hierarchy consisted of a graduated series of provocations that they were likely to experience on a day-to-day basis. Using an imaginal presentation of hierarchy scenes, clients practiced relaxation and personally generated self-statements to cope with arousal. Their anger diaries also provided a log of provocation experiences and their relative proficiency at anger management. Following treatment, clients were challenged with the application of their coping skills in imaginal, role-play, and direct provocation conditions (7).

In addition to cognitive coping and relaxation skills, persons with chronic anger problems need to acquire behavioral strategies for responding nonantagonistically to provocation. The task-oriented set is so designed; it can be augmented by facilitating responses that are incompatible with hostility, such as empathy and compassion. The ameliorating influence of empathy and nonantagonistic communications has been emphasized by Feshbach and Feshbach (28, 29).

The ability to manage internal arousal states and to adapt to stress events has become an increasingly necessary psychological skill. It is hoped that therapeutic processes for the regulation of uncontrolled anger will receive further research attention. I have proposed some directions for that research in the areas of essential hypertension and child abuse (7). At the same time, mental health professionals must recognize the many adaptive functions of anger that can be mobilized in the attainment of treatment goals.

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A Reconsideration of the Kety and Associates Study of Genetic Factors in the Transmission of Schizophrenia

BY LORNA S. BENJAMIN, PH.D.

The author reviews a study by Kety and associates that reported a significantly greater prevalence of schizophrenic spectrum disorders among the biological relatives of schizophrenic adoptees than among those of nonschizophrenic adoptees. The principal statistical analysis of the Kety study used an incorrect sample size (306 rather than 66) and failed to weight each index and control case (family) equally. This violation of the independence assumption would allow a few families to disproportionately influence the outcome. The author argues that proper statistical analysis applied separately to available categories indicates that significant differences between the index and control groups occurred mainly in the half-sibling category; this result violates the principle that genetic effects increase with greater consanguinity. She concludes that Kety and associates' study raises more questions than it answers regarding the role of genetic factors in schizophrenia.

EXTENSIVE EFFORTS have been devoted to determining whether and to what degree genetic factors are involved in the transmission of schizophrenia. Lacking the direct chromosomal evidence available in such diseases as Down's syndrome, investigators of schizophrenia have turned largely to the indirect method of statistical analysis of prevalence in populations that vary in degree of consanguinity and degree of environmental similarity. Such efforts are often frustrated by confounding of experiential with genetic factors, i.e., persons who are similar genetically also tend to be raised in similar environments. Instances in which persons with similar genetic heritage are raised in different settings are seized upon as a means of separately identifying genetic and environmental influences.

The most carefully controlled, frequently cited investigation of this sort was conducted by Kety, Rosenthal, Wender, and Schulsinger, who provided an exhaustive report of their original work in a volume edited by Kety and Rosenthal (1). The highlights of this study, which contrasted institutional records of prevalence of schizophrenia in biological families of schizophrenic adoptees (index group) with prevalence of schizophrenia in biological families of adoptees without psychiatric history (control group), were also published later in this journal (2). Recently a follow-up study based on interviews in addition to the institutional records has appeared (3).

All three publications reported significantly more relatives with schizophrenia in the index group of adoptees and concluded that a strong link between genetic factors and transmission of schizophrenia had been demonstrated. Results were interpreted in terms of an "illness" model in which schizophrenia is hypothesized to be analogous to diabetes mellitus (3, p. 164). This illness model includes biochemical and somatic factors inferred from the genetic findings; it also includes the possibility of psychological factors coming from environmental influence.

This paper is not intended to take a position for or against the argument supporting the role of genetic factors and/or biochemical "illness" components in schizophrenia. Rather, it is intended to correct the record. When proper statistical analysis is applied to the Kety and associates data, the significant contrasts obtained do not provide convincing support for the authors' broad claim that "genetic factors operate significantly in the transmission of schizophrenia and . . . the higher than expected prevalence of schizophrenia in the families of naturally reared schizophrenics is a manifestation of such transmission" (2, p. 304). The authors' conclusions are premature and their findings raise more questions than they answer. The environmentalist and the geneticist are equally disadvantaged in accounting for the peculiar group differences actually obtained.

DESIGN AND METHOD OF THE STUDY

The original study of Kety and associates was distinguished by the extent of its efforts to control confounding of genetic and environmental variables. The investigators identified and categorized subjects by searching the extensive and complete population register of Denmark, adoption records, the Psychiatric Register of Denmark's Institute of Human Genetics, the records of hospitals, police, the military, and the records of the Mother's Aid Organization. The categories of chronic schizophrenia, acute schizophrenia, borderline schizophrenia, possible schizophrenia, and inadequate personality were included as representing

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the schizophrenic spectrum disorders; 33 adoptees with records of psychiatric hospitalization were cast into the index group by independent judges reading English-language abstracts of Danish psychiatric histories. Thirty-three controls from the same national pool of 5,483 adoptees were matched to the index cases for sex, age, socioeconomic class of the adoptive parents, time spent with the biological family, and preadoption history. The controls differed from index cases in that they had no known psychiatric history. The investigators then searched the records to locate all possible biological and adoptive parents, siblings, and half-siblings for each index and control case. Judges independently determined whether or not schizophrenia was present or absent in these relatives.

RESULTS AND DATA ANALYSIS

The principal findings of this study (2, p. 304) are reproduced in table 1. Data in the first column of table 1 were reported by the authors as being significant at the .0072 level. Of the 150 biological relatives identified for the index cases, 13 were classified as having schizophrenic spectrum disorder. For the control adoptees, 156 relatives were identified; 3 of these were classified as having schizophrenic spectrum disorder. These data indicate that 8.6% of the biological relatives of the index schizophrenics also had schizophrenia, whereas only 1.96% of the biological relatives of adoptees without psychiatric history had a schizophrenic spectrum disorder. Comparisons of the prevalence of illness in biological and adoptive relatives were appropriately ignored since adoptive families are screened for health.

The particular statistical test used in comparing biological relatives of index and control groups was not mentioned, but it was probably a chi-square test applied to the data from column 1 of table 1 as they are re-presented in table 2. The outcome of a chi-square test applied to this 2×2 contingency table using the correction for continuity is 5.73, which is significant at better than the .0025 level. The authors apparently used Fisher's exact test to get the .0072 level reported.

An analysis of table 2 implies that 306 cases have been independently cast into one of the four cells in the table and the statistically significant result reflects differences in frequencies entered in the cells over and above the baseline rates represented by the marginal entries. The row marginals give different weights corresponding to (potentially) different group sizes. The column marginals give different weights corresponding to overall base rates of schizophrenia independent of group membership. Table 2 suggests that 13 schizophrenics were found in the joint classification that indicates index group membership and having a schizophrenic relative, whereas only 7.84 instances would be expected on the basis of independent marginal estimates. Similarly, only 3 cases were found in the joint classification indicating control group membership and having a schizophrenic relative, whereas 8.16 would be

TABLE 1

Prevalence of Schizophrenic Spectrum Disorders Reported by Kety and Associates (2) Among Biological and Adoptive Relatives of Schizophrenic and Nonschizophrenic Adoptees

Sample	Prevalence of Schizophrenia	
	Biological Relatives	Adoptive Relatives
Index cases (N=33)	13 of 150	2 of 74
Control cases (N=33)	3 of 156	3 of 83
Significance	p=.0072	n.s.

TABLE 2

Implied Logic of Kety and Associates' (2) Statistical Analysis of the Prevalence of Schizophrenia Among Biological Relatives of Schizophrenic and Nonschizophrenic Adoptees

Sample	Biological Relatives		
	Schizophrenic	Not Schizophrenic	Total
Index cases (N=33)	13	137	150
Control cases (N=33)	3	153	156
Total	16	290	306

expected on the basis of marginal estimates. These represent 66% ([13–7.84]/7.84) and 63% ([3–8.16]/8.16) deviations from expectation and do indeed seem "significant."

Sample Size and Weighting

However, table 2 does not in fact describe or correspond to the experimental procedure, and it violates the independence assumption (reviewed in reference 4, pp. 395–398; a theoretical background appears in reference 5, pp. 204–209). The 66 individuals presented in the study should be independently classified in the 2×2 form of table 2. Not only is the sample size 66 instead of 306, but there is also a confounding of genetic and environmental factors. Each index case should have a weight of 1/66 (or 1/306, if 306 had been the legitimate sample size) in the total analysis. The procedure of counting up all the possible relatives of each index case and pooling them as if they were independent samples (to give an N of 150 as shown in table 2) would allow some families to disproportionately affect the results. For example, index cases with more than 1 schizophrenic relative could unduly weight the cell in the first row, first column of table 2. This group of people, who were likely to have been reared together and to have had the same health care system supplying information for the records used in the study, could falsely inflate the "significance" of the difference.

Table 1 was the only analysis presented in the journal paper (2) that summarized the highlights of the original study. The problem of disproportionate contributions from particular families was acknowledged in the follow-up report (3, p. 156), but the proper analysis based on an N of 66 was not consistently applied even in this paper. The inflated N was used for most tables

presented. Even more curious was the fact that the proper analysis (using N=66) was reported in a sentence in the text of the first paper (1, p. 356), and differences between index and control families were in fact significant in the expected direction.

It would be nice to let the matter rest with the observation that, although the authors violated the independence assumption in many of their analyses, when the proper analysis was applied the critical difference between index and control subjects was significant in the expected direction, so their conclusions should stand. However, on taking a closer look at the index-control group differences, a new problem emerges.

Significance and Degree of Consanguinity

Table 3 presents the number of index and control families (N=66) having schizophrenia, by degree of consanguinity. The top section of the table reports the results of the original institutional records study (1). The bottom section reports results of the second, more questionable study, which added relatives defined as schizophrenic on the basis of one interview conducted by an author whose impressions were independently judged by other authors reading transcripts edited for reference to consanguinity (3). In both studies there was a highly significant difference between index and control groups in the half-sibling category, and there were no clear differences in the full-sibling or parent categories. This finding is peculiar and contradictory. It shows, in effect, that the *less* the consanguinity, the *greater* the "genetic" effect. Differences should be weakest, not strongest, in the half-sibling category. The authors discount this contradiction by noting that there were few siblings located for these adoptees. Indeed, in the original study there were only 2 index families and 4 control families that yielded any full siblings at all. By contrast, there were 25 index families and 28 control families having half-siblings. A chi-square analysis taking these differential Ns into account would use the numbers of families having persons in the category being studied. This would yield family sample sizes of 2 and 4 for index and control groups, respectively, in the sibling matrix. The procedure would use family sample sizes of 33 and 32 in the parent category, and Ns of 25 and 28 for families in the half-sibling category. The significance of the findings reported in table 3 does not change when this procedure allowing for differential Ns is applied to the data in the original study. (Not enough information is available to apply it to the follow-up study, which added schizophrenia diagnosed on the basis of one interview.)

Fisher's exact test is the only alternative for analysis of the sibling category using sample sizes of 2 and 4, and the resulting significance level (p=.93) emphasizes how weak the contrast is in such a small sample. It is clearly reasonable to argue, as did the authors, that too few siblings were available to give a useful contrast between index and control subjects in the sibling category. However, the fact remains that the sampling of parents was nearly complete; in fact, both parents were located in 90% of the index families and in 94% of the control families. If there is an unequivocal genetic effect, the differences between index and control groups must be greater in the parent category than in the half-sibling category. Table 4 reviews the basic genetic logic behind this suggestion.

If one parent represents gene pool [a] and the other parent gene pool [b], then their children (sibling category) would have 50% sampling from gene pool [a] and 50% from gene pool [b]. A survey such as that conducted by Kety and associates invokes a logical .OR. condition (i.e., tallies yes if one or both conditions are met) for the parent category, since either a schizophrenic mother or father was accepted in the tally. Un-

TABLE 3

Distribution of Schizophrenia Reported by Kety and Associates (1, 3) Among Biological Relatives of 33 Schizophrenic and 33 Nonschizophrenic Adoptees, by Degree of Consanguinity

	Relative with Schizophrenia								
	Sibling			Parent			Half-Sibling		
Study	Families Affected	Families Not Affected	Total	Families Affected	Families Not Affected	Total	Families Affected	Families Not Affected	Total
Kety and associates (1)*									
Index cases	1	32	33	3	30	33	6**	27	33
Control cases	1	32	33	2	31	33	0	33	33
Total	2	64	66	5	61	66	6	60	66
Kety and associates (3)***									
Index cases	1	32	33	8	25	33	13**	20	33
Control cases	1	31	32	3	29	32	3	29	32
Total	2	63	65	11	54	65	16	49	65

*Based on institutional records.
**Significant differences between index and control groups (p<.01, chi-square test).
***Based on institutional records and interview data.

TABLE 4
Hypothetical Gene Pools* of Parents, Siblings, and Half-Siblings

Category	Gene Pool
Parents	
Parent A	[a]
Parent B	[b]
Siblings	
Any child of A and B	[½(a,b)]
Half-siblings	
Child of A and B	[½(a,b)]
Child of A and X or	[½(a,x)] or
child of B and X	[½(b,x)]

*Each bracket describes the gene pool for one individual. The elements of the vector within each bracket total 1, accounting for 100% of each person's genes.

der this procedure, and using an analysis that allows for different sample sizes, differences between index and control subjects should be comparable for the parent and sibling categories. In other words, a sample of both parents includes gene pools [a] plus [b], as does a sample of siblings. A sample of half-siblings, however, taps gene pools [a] and [b], plus gene pool [x] from the new parent. The two categories from gene pools [a] and [b], namely parents and siblings, should show a larger, not a smaller, difference between index and control groups. The fact that a third category, which included a different gene pool, accounted for the difference between index and control cases precludes a straightforward genetic interpretation of the results.

Matching for Socially Adaptive Attributes

Before speculating on the meaning of the difference between half-siblings of index and control groups, it is important to first clarify some general methodological issues relevant to all comparisons of index and control groups. Although the interpretive assumption of the authors was that differences are associated with poor (destructive, defective, illness-inducing) genes in the index group, it is equally possible that observed differences could also be associated with good (constructive, superior) genes in the control group. For example, those who think of schizophrenia as a maladaptive social solution to problems in living might argue that the control adoptees without any psychiatric history had more genetically determined social assets, such as better physical appearance, intelligence, athletic ability, and/or other talents that can facilitate optimal social adjustment in Western culture.

Since it has been clearly established that these socially adaptive attributes have genetic links, those who argue that schizophrenia relates importantly to social adaptation would require, before accepting contrasts as indicative of a destructive "illness" gene, that the index and control groups be matched on these and related variables in the *biological* as well as in the adoptive families. Since no matching of any sort was reported for the biological families, it may not be possible to properly interpret the findings of the Kety and associates survey no matter how much additional information can be brought to bear. (The authors indicate that they plan to publish still more analyses of their sample [3, p. 157].) Since the study failed to match the biological families of index and control groups for genetically based social assets, it could be that control adoptees without psychiatric histories tended to come from middle- and upper-class persons with favorable genetic heritage who were giving up infants for adoption because of illegitimate teenage pregnancies, whereas index adoptees tended to have been put up for adoption because of more chaotic social situations characteristic of persons with less genetic (and environmental) advantage in social adaptation. However, this formulation, like the genetic interpretation, falters because of the failure to find differences between the index and control parents.

Thus the argument remains at a stalemate. A small sample of 66 adoptees yielded an unusual but understandably high proportion of half-siblings, and significantly more half-siblings of the index group had schizophrenia. However, the failure to find differences between index and control parents challenges both the simple genetic illness and genetic social advantage interpretations of the data at hand. Nor does a consistent environmental interpretation of the peculiar findings come to mind.

CONCLUSIONS

It is reasonable to hypothesize that there is an interaction between genetic and environmental factors in schizophrenia. The Kety and associates data do not help establish whether the correct model is the illness model of diabetes mellitus or whether schizophrenia reflects an interaction between genetics and social learning analogous to that presumed to operate in the development of intelligence. (Assume, for the sake of argument, that there is in fact agreement about the models for diabetes mellitus and for intelligence.) Whatever the appropriate model, it is clear that specific studies of biochemical contributions to human behavior remain a high priority. It is equally important to continue to develop better understanding of how to arrange environmental conditions for optimal social development and of how to provide effective corrective social learning experiences in cases in which development has aborted. The current data do not suggest that the biochemical approach has priority over the social approach or vice versa. Even if the results had been less equivocal, one would still worry about the potential usefulness of this particular approach to the question of the role of genetics in schizophrenia. The pitfalls of generating "definitive" models of human function on the basis of simple statistical contrasts are aptly noted by Feldman and Lewontin (6), who reviewed the recent controversy over genetics, intelligence, and race. They concluded:

At present, no statistical methodology exists that will enable us to predict the range of phenotypic possibilities that are inherent in any genotype, nor can any technique of statistical estimation provide a convincing argument for a genetic mechanism more complicated than one or two Mendelian loci with low and constant penetrance. Certainly the simple estimate of heritability, either in the broad or narrow sense, but most especially in the broad sense, is nearly equivalent to no information at all for any serious problem of human genetics. (6, p. 1168)

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Studies Designed to Disentangle Genetic and Environmental Variables in Schizophrenia: Some Epistemological Questions and Answers

BY SEYMOUR S. KETY, M.D.

The author addresses questions raised by Dr. Lorna S. Benjamin in the preceding paper. He quotes from the original studies to respond to questions regarding statistical logic, the relative prevalence of schizophrenia among half-siblings and parents of index adoptees, and the possible role of socioeconomic status as a confounding variable.

THE RESEARCH that David Rosenthal, Paul Wender, Fini Schulsinger and I have carried out with a number of associates over the past 14 years on a total sample of adopted individuals and their families has aroused some interest and comment, not all of it as critical as that found in the preceding paper. This response will attempt to answer the questions Dr. Benjamin raises. Many have been answered in the papers she criticizes but may not have read very carefully. Thus:

> *Dr. Benjamin:* The particular statistical test used in comparing biological relatives of index and control groups was not mentioned . . .
>
> *Our paper:* The difference is highly significant (p, one sided probability from exact distribution=0.0072). (1, p. 353)
>
> *Dr. Benjamin:* The principal statistical analysis . . . used an incorrect sample size (306 rather than 66) and failed to weight each index and control case (family) equally, [which] . . . would allow a few families to disproportionately influence the outcome.
>
> *Our paper:* By examining the distribution of schizophrenia spectrum disorders in the biological families and taking family size into consideration, no evidence is found to support the thesis that the high prevalence in the relatives of index cases derives from a few deviant families. The 13 such relatives of the total index sample come from 9 families, the 9 relatives with schizophrenia spectrum disorders among the early transferred cases represent 6 families, and the frequency of affected biological families in each sample of index cases (9/33 or 6/19) is significantly higher (p=0.028 or 0.012) than the frequency of affected families for the corresponding control groups (2/32 or 0/19). (1, p. 356)

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> *Our paper:* We have dealt up to this point with these relatives as individuals; as a matter of fact, they are members of families and it is probably not entirely appropriate to perform statistical analyses using the degrees of freedom represented by the individual relatives when these are clustered into a limited number of biological and adoptive families. Therefore, we have also analyzed these data in terms of families. (2, p. 156)
>
> Tables 4a and 4b give the distribution of definite and uncertain schizophrenia in the biological and the adoptive families of the index cases and the controls for those probands who have at least one such diagnosis among their biological or adoptive family. Whereas the number of adoptive families with at least one such case is relatively small and not significantly different for index vs. control probands, more than half of the biological families of the index cases (17/33) show one or more definite or uncertain schizophrenias as compared with 5 of 34 biological control families and only one biological family of the 23 "screened" controls. There are significant differences in this regard between the index families and the combined control families (p=.0014) or the "screened" control families (p=.00013). [Footnote, p. 154: p in this and other tables refers to Fisher's exact probability.] (2, p. 156)

However, our conclusions regarding the operation of genetic factors in schizophrenia were not supported by these findings alone, even though they were obtained using the statistical logic Dr. Benjamin requires; we also pointed out that

> This evidence is compatible with a genetic transmission for schizophrenia, but it is not entirely conclusive, since there are possible environmental factors such as *in utero* influences, birth trauma, and early mothering experiences which have not been ruled out. One cannot, therefore, conclude that the high prevalence of schizophrenic illness found in these biological relatives of schizophrenics is genetic in origin. However, the largest group of relatives which we have is, understandably, the group of biological paternal half-siblings. Now, a biological paternal half-sibling of an index case has some interesting characteristics. He did not share the same uterus or the neonatal mothering experience, or an increased risk of birth trauma with the index case. The only thing they share is the same father and a certain amount of genetic overlap. Therefore, the distribution of schizophrenic illness in the biological paternal half-siblings is of great interest . . . (2, p. 156)
>
> There are 63 biological paternal half-siblings of index cases and 64 paternal half-siblings of controls, which have

between them 16 individuals diagnosed by records or interviews as definite or uncertain schizophrenia. There is, however, a highly unbalanced distribution; 14 are among the half-siblings of index cases and only 2 in the controls ($p=0.001$). [When these results are analyzed by probands as Dr. Benjamin's logic requires, we find 10 schizophrenic adoptees with definite or uncertain schizophrenia in biological paternal half-siblings compared to 2 control adoptees ($p=.01$)] . . . We regard this as compelling evidence that genetic factors operate significantly in the transmission of schizophrenia. (2, p. 156)

SCHIZOPHRENIA IN HALF-SIBLINGS AND PARENTS

In the second half of her paper, Dr. Benjamin concedes that her statistical analysis *was* applied in our publications, but now raises another objection:

> . . . when the proper analysis was applied the critical difference between index and control subjects was significant in the expected direction, so their conclusions should stand. However, on taking a closer look at the index-control group differences, a new problem emerges . . . . In both studies there was a highly significant difference between index and control groups in the half-sibling category, and there were no clear differences in the full sibling or parent categories. This finding is peculiar and contradictory. It shows, in effect, that the *less* the consanguinity the *greater* the "genetic" effect.

The last sentence is an improper inference, drawing a conclusion that statistical logic does not permit. There were, in fact, 13 index probands with diagnoses of definite or uncertain schizophrenia in one or more of their half-siblings and 8 index probands with such diagnoses in their biological mother or father; the difference between these numbers is not statistically significant and does not justify a statement that one is higher than the other. Let us assume, however, that we had made significantly more diagnoses of schizophrenia in half-siblings than in parents; would that in fact contradict genetic logic? It would do so only if one thinks of genetics in the most simplistic terms and fails to take into consideration the socioenvironmental selective factors that confound the distribution of genes in a human population and the problems of ascertainment of human disease.

Epidemiological studies in large populations have always found a low prevalence of schizophrenia in the parents of schizophrenics. Slater (3), summarizing 25 independent investigations, cited a combined expectation of 3.8% in parents, 8.7% in siblings, and 3.2% in half-siblings. This deficiency of schizophrenia in parents has been adequately explained on the basis of the demonstrated reduced fertility of overt schizophrenics. In the case of our sample there are additional social factors that significantly reduce the likelihood that a schizophrenic will become the parent of a child put out for adoption:

> The enlightened social system in Denmark makes it possible for a pregnant woman to obtain a legal abortion on the basis of a history of schizophrenia in herself or in the father. This, in addition to the relative infertility of overt schizophrenics, could have resulted in the removal from our sample of adoptees of a disproportionate fraction of those with schizophrenia in the biological parents. If, in a similar manner, the adoption process screens out children born of parents with known schizophrenia, this would further have contributed to the possible impoverishment in our adoptee sample of potential index cases with an established incidence in their biological families. (1, p. 360)

In addition, there are many factors that reduce the likelihood of making a diagnosis of schizophrenia in a parent as opposed to a half-sibling in our sample. More than twice as many index biological relatives had died than had their controls. This excess included five suicides, all of which occurred in the index biological parent group. Since it is well known that suicide is an unfortunate outcome for many schizophrenics, it is likely that this in itself depleted the sample of some schizophrenic biological parents. Because of these and other deaths among the parents, who constitute an older population, only 45% of the biological parents were interviewed, as contrasted with 83% of the half-siblings. All of the factors enumerated above, each of which would have the effect of reducing the ascertained prevalence of schizophrenia in our sample of biological parents, make it difficult to agree with the premise "that the sampling of parents was complete," or with the conclusion based on that premise that our results are incompatible with genetic principles.

SOCIOECONOMIC STATUS CONSIDERATIONS

Dr. Benjamin levels still another criticism at these studies and proposes a hypothesis that was entertained, examined, and rejected in one of our previous publications (4).

> *Dr. Benjamin:* Those who argue that schizophrenia relates importantly to social adaptation would require, before accepting contrasts as indicative of a destructive "illness" gene, that the index and control groups be matched on these and related variables in the *biological* as well as in the adoptive families. Since no matching of any sort was reported for the biological families it may not be possible to properly interpret the findings of the Kety and associates survey no matter how much additional information can be brought to bear. (The authors indicate that they plan to publish still more analyses of their sample). Having failed to match the index and control groups of biological families, it could be that control adoptees without psychiatric histories tended to come from middle- and upper-class persons with favorable genetic heritage who were giving up infants for adoption because of illegitimate teenage pregnancies, whereas index adoptees tended to have been put up for adoption because of more chaotic social situations characteristic of persons with less genetic (and environmental) advantage in social adaptation. [Dr. Benjamin did not know that only 3 of the index adoptees and 4 of the controls were born of married couples.]

> *Our paper:* If there is a relationship between social class and psychopathology, how may it be interpreted? Three major explanatory hypotheses have been advanced. The first, the "sociogenic hypothesis," asserts that there are intrapersonal, familial, and extrafamilial concomitants of lowerclass status which favor, or at least fail to inhibit, the development of psychopathology. (4, p. 318)

It was precisely because we did not match for social class in the biological parents that we were able to test Dr. Benjamin's hypothesis, along with other hypotheses, that the net effect of the many variables encompassed under social class exerts a significant effect on the development of schizophrenia. After the 33 schizophrenic index probands had been identified, their control adoptees (controls 1) were also selected, matched for age, sex, length of time spent with a biological parent, and socioeconomic status (SES) of the adoptive father. SES was controlled in the rearing family to minimize class-dependent rearing variables, but remained a dependent variable in the biological family. Later, a second and larger group of control adoptees (controls 2) was selected

> by randomly choosing from the adoptee pool two subjects (with no known psychiatric diagnosis) for each index case, matching only for sex and date of adoption. This second group consisted of 66 individuals whose average age approximated that of the adoptees but whose adoptive families' SES were *not* matched with those of the index group. Finally, from the information available, we tabulated the SES of the adoptive and biological fathers of both groups. (4, p. 320)

Dr. Benjamin's hypothesis predicts that the SES of index biological parents will differ from that of the biological parents of the nonschizophrenic controls. Hypotheses of class-dependent environmental variables predict that the SES of index adoptive families will differ from that of the unmatched control adoptive families.

> The means and standard deviation of the three groups are [presented]. [The SES of the biological fathers of index, control 1, and control 2 adoptees were 2.1, 2.3, 2.2, respectively; the SES of the respective adoptive fathers were 2.9, 2.6, 2.7.] There is no significant difference between the mean SES of the biological fathers of the index group and the biological fathers of the two control groups, nor between SES of the adoptive fathers of the index group and the second control group. (4, p. 320)

In the first control group, the SES of the adoptive parents was expected to be the same as that of the index cases, since, as mentioned, the index and control groups were matched on this variable. Lest it be argued that the enumeration and statistics were too insensitive to detect an appreciable difference, a significant difference ($p<0.05$) did occur between the mean SES of adoptive and biological fathers (2.7 versus 2.2).

Those results do not pertain to all environmental influences that may operate in the development of schizophrenia. In fact, there is no doubt in our minds that important environmental determinants exist and should be elucidated by well-designed and rigorous research. These findings merely fail to support simplistic notions of "class" and "societal" determination of schizophrenia. We have not claimed that these results pertain to the mode of genetic transmission; we have not generated "definitive models of human function on the basis of simple statistical contrasts," nor have we pretended to evaluate heritability. Dr. Benjamin's final caveat is not particularly appropriate or relevant. More pertinent would have been the statement of Matthysse and Kidd (5) that "heritability of schizophrenia is not a meaningful concept or statistic, even though the disease has a clear genetic component."

CONCLUSIONS

The results of all of our studies have permitted us to conclude only that genetic factors operate significantly in the schizophrenic syndrome, a conclusion that should disturb only those who assume, without acceptable evidence, that schizophrenia is not a mental illness and is entirely psychosocial in origin. In this connection, a thoughtful and balanced statement by two social scientists, S.C. Plog and R.B. Edgerton (6), seems especially appropriate.

> We continue to believe, for example, that social systems do indeed have the power to program man to suffer all manner of disorders, including what we call neuroses. But, for more serious disorders, such as the psychoses, particularly that chimera called schizophrenia, we urge a second look. We would caution the sciences of man as a social and psychological being not to forget that man is also an animal, and that man's immense plasticity and sensitivity to his social and cultural surroundings should not becloud the fact that he is also a host for micro-organisms, the victim of sundry toxins, and that his primate heritage includes heritable disorders of many sorts. . . . The biogenesis of schizophrenia must be taken seriously; and not only by biochemists and geneticists, but by social scientists as well. Only then will our perspective on mental illness be complete. (6, p. 595)

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Prompt Publication Policy

The *Journal* would like to remind authors who are particularly interested in early publication (whether to establish priority of an idea, reveal innovative results of new research, or for other pressing reasons) of its prompt publication policy. Under this policy, short (maximum of six double-spaced pages) manuscripts will be considered for publication in the Brief Communications section of the first available issue. These manuscripts must still undergo expert scrutiny before being accepted, and two months must be allowed for the printing process. However, the time required for publication of these short articles can be lessened considerably.

Authors who would like to have their manuscripts considered under this policy should indicate this desire, as well as the reasons for it, when they submit their manuscripts.

The Legal Implications of Sexual Activity Between Psychiatrist and Patient

BY ALAN A. STONE, M.D.

The author examines the legal and professional sanctions against sex between therapist and patient. The relevant literature of criminal law suggests that charges of rape or related sexual offenses against psychotherapists who exploit their patients are a remote possibility. Although sexual activity between therapist and patient may form the basis of a malpractice claim, the existing case law is complicated, and the legal distinctions are not always consistent with good psychiatric practice. Professional associations lack the legal expertise and indemnification to act in these situations, but medical boards in some states have the power to revoke licenses. In the end, patients must depend on the decent moral character of their therapists.

LAST YEAR at the APA meeting in Anaheim, Calif., Dr. William Masters suggested that any therapist who exploits the power and position of his or her professional status to have sexual intercourse with a patient should be charged with rape. He and Virginia Johnson stated,

> We feel that when sexual seduction of patients can be firmly established by due legal process, regardless of whether the seduction was initiated by the patient or the therapist, the therapist should initially be sued for rape rather than for malpractice, i.e., the legal process should be criminal rather than civil. Few psychotherapists would be willing to appear in court on behalf of a colleague and testify that the sexually dysfunctional patient's facility for decision making could be considered normally objective when he or she accepts sexual submission after developing extreme emotional dependence on the therapist (1).

In this paper I will examine the gap between Masters and Johnson's moral indignation and the existing sanctions in law. There are three specific limitations in the scope of this paper. First, I shall for convenience assume that the problem is one of male therapists being involved with female patients, although the legal ramifications are by no means confined to this assumption; indeed, one of the most well-known criminal cases involved homosexual activities between a male physician and his male adolescent patients (2). Second, I have omitted any discussion of the legal problems of using sexual surrogates other than the psychotherapist in sexual treatment; that would require another paper. Third, I have elected as a matter of personal judgment not to use the names of psychotherapists or patients despite the fact that the records are in most instances in the public domain.[1]

There are three possible legal sanctions against sex between therapist and patient. First there are the various statutes of the criminal law, including rape and rape by fraud or coercion. The latter at least theoretically might be applicable to the situations Masters and Johnson had in mind. Second, there are tort actions, including malpractice, in the civil courts. Third, there is revocation of license to practice by the medical board of licensure. Beyond these legal approaches there are the ethical sanctions of professional associations, societies, and institutions that might potentially have teeth by limiting career opportunities, patient referrals, and staff privileges at various institutional facilities.

CRIMINAL LAW

My review of the legal literature suggests that the criminal courts have been extremely reluctant to adopt Masters and Johnson's suggestion. Rape charges apparently are rarely brought, and, when they are, rarely do they stick. The few reported cases involved some element of physical coercion or force rather than the kind of psychological coercion Masters and Johnson referred to. In fact, in cases in which psychiatrists have been convicted of rape or sexual assault, their behavior has been egregious by almost any moral or legal standard.

Thus an East Coast psychiatrist who gave his patients ECT and/or injections of hypnotic drugs and then had intercourse with them was convicted and served time in prison.[2] Similarly, a West Coast psychiatrist who had intercourse with a 16-year-old girl who

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[1]The names of the principals of the cases cited have been omitted to protect both patients and physicians from unnecessary public attention.

[2]Cite omitted.

was referred for therapy for promiscuity was prosecuted for and convicted of statutory rape (3).

In contrast to these cases, when a legally competent patient is told that sexual intercourse is to be administered as therapy and the patient consents, the prevailing judicial opinions are that there is no rape because there has been neither force nor fraud (4). However, a few states have passed statutes that specifically encompass Masters and Johnson's moral judgment. The clearest example is Michigan, which has adopted the following statutory language defining coercion in rape: "When the actor engages in the medical treatment or examination of the victim in a manner or for purposes which are medically recognized as unethical or unacceptable" (5). Under this statute sex as therapy might be construed as rape. The implications of this statute are quite novel in that the definition of rape is placed in the hands of the expert witnesses.

Ohio has adopted even broader statutory language, which would inculpate psychotherapists for the lesser offense of sexual battery. The Ohio statute reads as follows: "The offender knowingly coerces the other person to submit by any means that would prevent resistance by a person of ordinary resolution" (6).

Although the criminal law has been invoked almost not at all when a psychotherapist exploits the transference for sexual gratification but does not claim that the sexual activity is treatment, this Ohio statute might be applicable if prosecutors and juries believed that transference creates a coercive relationship.

Summing up, unless new criminal statutes are enacted, criminal charges of rape or related sexual offenses against psychotherapists who exploit their patients are a remote possibility at best.

CIVIL LAW

Let me then turn to the civil area, which involves suits for damages and particularly malpractice. Although it may be an unimportant professional distinction, it is important in these legal cases whether the sexual activity is designated as therapy or not. If a therapist induces a patient to engage in sexual activity on the basis that it is treatment, it will more readily be considered under the rubric of malpractice. If the therapist has an affair with a patient separate from the treatment, no legal cause of action may be available. This legal distinction becomes apparent when suits are brought by husbands whose wives have been seduced by their therapists. In this context the courts seem unwilling to allow the husband's claim of malpractice; indeed, most suits of this sort have failed (7).

However, this legal distinction is somewhat muddied because there are cases in which judges have held that misuse of the transference is a basis for psychiatric malpractice. One southern psychotherapist who told his patient that he was going to divorce his wife and wanted to marry her was said by the court to have engaged in "conduct below acceptable psychiatric and medical standards" (8). The husband was allowed to recover the cost of his wife's hospitalization and treatment. All of the experts in this case agreed that the psychiatrist had acted out his countertransference and that his profession of love was inappropriate.

Presumably, all of the experts would a fortiori agree with the testimony given in a recent case by Dr. Willard Gaylin that "there are absolutely no circumstances which permit a psychiatrist to engage in sex with his patient" (9). All such instances constitute misuse of the transference.

Unfortunately, there are more legal complications to a civil suit of this sort than one might imagine. Many states have passed so-called heart balm statutes that bar civil liability for sexual activity, e.g., seduction, alienation of affections, or criminal conversation. It is the heart balm act that prevents husbands from collecting. In a recent case an East Coast psychotherapist claimed that the heart balm act meant there could be no basis for a malpractice suit by the patient. However, the court held to the contrary that the relationship of a psychotherapist to a patient was a "fiduciary relationship" analogous to that between a guardian and his ward. Further, the court stated that "there is a public policy to protect a patient from the deliberate and malicious abuse of power and breach of trust by a psychiatrist when that patient entrusts to him her body and mind" (9).

The judicial decision that analogized the therapist-patient relationship to the guardian-ward relationship not only undercuts the heart balm act but also does away with the difficult problem of consent.

The facts alleged in this case were that a patient with homosexual predispositions and heterosexual anxiety was induced to have repeated sex with her psychiatrist as a form of therapy. There is in this case, as in all sexual situations that take place in private, the problem of corroborating evidence for the patient's testimony. Ordinarily in such cases testimony as to similar conduct by the psychiatrist could be excluded, but the psychiatrist in this case claimed to be impotent. Therefore, the patient was able to offer the testimony of three other women patients, two of whom reported similar sexual experiences with the psychiatrist and one of whom described blatant and inappropriate sexual behavior and attempted seduction by him. Some of this testimony was stricken from the record as not relevant to the time period during which the psychiatrist claimed impotence. The psychiatrist claimed that the two patients whose testimony was admissible were both suffering from erotomania. The jury, after a lengthy trial, awarded the patient $250,000 compensatory damages and $100,000 punitive damages. However, these huge awards did not remain in effect.

The reasons for the revocation of the amount of damages are quite complex; I will summarize and highlight what I take to be important. First, the therapist's malpractice insurer refused to defend him, leaving the therapist to support three years of litigation on his own. However, after the damage judgment was

awarded, the patient sued the insurance company for part of the damages and settled for $50,000. The therapist pursued his own legal appeals, and in a subsequent decision a higher court dismissed the punitive damages of $100,000 and reduced the compensation award to no more than $25,000. At most, therefore, the patient will receive $75,000, less legal fees.

Furthermore, despite the important holdings in this case, the decision does not clarify the malpractice implications of sex between therapist and patient because there were two lines of defense that this therapist did not assert: 1) that the patient had freely consented to an affair and had known it was not therapy; 2) that the therapist believed sex between the doctor and patient was therapeutic, the patient had been told in advance that sexual activity would be part of the therapy—that is, she had been given full disclosure before the transference developed. Instead, the therapist insisted that the patient had a psychotic transference.

Both of these defenses, although unacceptable to American psychiatry, may still be appropriate defenses in a court of law. Nonetheless, insurers have responded as if sex between therapist and patient is a clear instance of malpractice. The APA insurers have been quick to settle claims. The result is that malpractice rates for all of us will escalate while the offending therapists are protected from the adversities concomitant to a trial.

The American Psychological Association has pursued an alternate avenue: they have obtained insurance that excludes liability for sexual activity. Whether the adverse effects of sex between therapist and patient should be compensable by an insurance policy is, I think, a debatable question.

The problem of estimating the damages suffered in these malpractice suits was reflected in the appellate decision in the case I have been discussing (9). The court reduced the $350,000 award to $25,000. There was one dissenting judge who was prepared to argue that there was no malpractice and no damages. He argued that the civil courts were not the place for dealing with the problems of sex therapy or sex between doctor and patient. As he put it, "Although the plaintiff was suffering from a number of emotional problems, her competency was never placed in issue." Thus he rejected the fiduciary theory, insisting that the patient was legally competent to consent to have intercourse. He went on,

> Is it not fair to infer therefore that she was capable of giving a knowing and meaningful consent? For almost one and a half years while this "meaningful relationship" continued the plaintiff was not heard to complain. Upon the defendant terminating the relationship this law suit evolves.

Although the judge made it clear that he believed the jury finding that the psychiatrist had had intercourse with his patient and that the psychiatrist "obviously did not help his cause by denying what the jury found to be the fact. . . . Nevertheless, however ill-advised or ill-conceived was the choice of his defense, in my view this did not constitute malpractice." He also stated,

> I neither condone the defendant's reprehensible conduct, nor maintain that it was not violative of his professional ethics and Hippocratic oath. . . . For violation of his Hippocratic oath, if there be any, let him suffer the sanctions of the medical ethics board or other appropriate medical authority.

In this disposition of turning the case over to the medical licensing board and the profession for appropriate action, the dissent was in fact joined by the majority, who stated,

> Sex under cloak of treatment is an acceptable and established ground for disciplinary measures taken against physicians either by licensing authorities or professional organizations.

Interestingly enough, the court did not foreclose the matter of whether the psychiatrist should be deprived of his license or sanctioned by his professional organization:

> Whether defendant acted in such manner as to seriously affect his performance as a practitioner in the psychiatric field should be left to these more competent fora. The only thing that the record herein supports is that his prescribed treatment was in negligent disregard of the consequences. For that and that alone he must be held liable.

PROFESSIONAL BOARDS AND ASSOCIATIONS

As one looks at the capability of licensing boards and professional associations, which were considered "the more competent fora" by that court, according to my research there is an almost total lack of capacity to act. The professional associations have no subpoena power and no expertise in criminal or other evidentiary investigation. They have neither formulated necessary procedures nor employed sufficient legal staff to protect the due process rights of a doctor charged with some such act or themselves if the charged doctor sues them. Indeed, it often happens that, because his or her whole career is at stake, a doctor charged with any ethical complaint hires a lawyer who immediately threatens to sue the society, the association, and its ethics committee, all of whom have no indemnification. That characterization, I must confess, is up to this point an accurate description of APA. However, we are not alone. Lawyers expert in private association law tell me that none of the associations has the proper machinery and that many of them behave as we do, by postponing any and all action until all legal appeals are exhausted in the criminal and/or civil area.

Finally, then, we turn to the licensing boards in hopes that something can be done there. The fact that a number of cases exist in which licensing boards have

actually revoked licensure for sexual activity of doctors with patients suggests that some power resides in these boards and is being used.[3] However, the licensing boards in each of the states are organized quite differently. Some have a close relationship to the medical society, others do not, and some are impotent bureaucracies reluctant to do anything. Therefore, one cannot expect real consistency across the different jurisdictions. Each jurisdiction has enabling statutes that limit the scope of authority.

In one western state, for instance, a doctor guilty of the grossest sexual impropriety could not have his license revoked because the only ground was "grossly negligent or ignorant malpractice"; his board found that he was guilty of "grossly negligent or immoral malpractice" (13).

COMMENT

I have briefly described four possible avenues for punishing, disciplining, or deterring sexual activity between therapist and patient. None of these avenues seems to provide an effective system of control. In the end, in this as in most other things, patients must depend on the decent moral character of those entrusted to treat them.

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[3]There have been at least eight reported appeals from license revocation that were grounded on sexual impropriety by a physician. Several were by psychiatrists (10–12).

The Alcoholic Physician: A Survey

BY LECLAIR BISSELL, M.D., AND ROBERT W. JONES, M.A.

The authors conducted interviews with 98 recovered alcoholic physicians, all of whom had been entirely abstinent for a minimum of one calendar year. Psychiatry was the only specialty clearly overrepresented. A disproportionate number of subjects reported high standing in their medical school classes. Nearly half of the sample had experienced difficulty with drugs other than alcohol. While legal sanctions and admission to health care and correctional institutions were common among this group, relatively little formal response of a disciplinary nature from colleagues or medical organizations was reported.

ALTHOUGH THE PROBLEM of drug dependence in our society is receiving increased public and professional attention, information about the alcoholic physician is still relatively scarce. Seventy percent of adult Americans do drink, and of these an estimated 6% to 10% develop alcoholism (1). Assuming that physicians do not differ from their countrymen in drinking practices, then about 226,800 of our 324,000 physicians (2) are drinkers and between 13,600 and 22,600 are or will become alcoholics. The actual number is likely to fall toward the upper end of this range because of the large number of men in the physician population and because of the apparent relationship between alcoholism and higher educational attainment (3). More than 4 times as many men as women are alcoholics (3). The proportion of drinkers among college graduates is markedly higher than that among other educational levels, and generally, the greater the proportion of drinkers, the higher the rate of alcoholism. In addition, Glatt (4) reported an above average standard mortality rate from cirrhosis of the liver among English physicians, and many studies of physicians undergoing psychiatric treatment have reported that alcoholism is a common finding (5–12).

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That alcoholism frequently precedes or underlies addiction to other drugs has been mentioned repeatedly. Vincent (13) stated that half of all alcoholic physicians eventually develop drug addiction. Modlin and Montes (14) reported that 25 physician addicts at Menninger Memorial Hospital, Topeka, Kan., all used varying amounts of alcohol, analgesics, sedatives, or ataractics in combination with narcotics. In a 1966 study of 68 physician addicts at the U.S. Public Health Service Hospital in Lexington, Ky., alcoholism, chronic fatigue, and physical disease were the principal reasons given for the beginning of self-medication (15). Also frequently reported is the high incidence of alcoholism in association with physician suicides (16). Blachly and associates (17) studied 80 physicians who killed themselves during the period 1965–1967 and found that 39% were described as alcoholic or heavy drinkers and 19% were drinking at the time of their death.

Most of the available information about the alcoholic physician is drawn from observations of hospitalized patients or those under psychiatric treatment. We found only one prospective study in the literature, that of Vaillant and associates (18), who reported that in a group of 45 physicians "selected for psychologic health," self-medication with drugs or alcohol was the cause of one-third of the total time that this group spent in the hospital. Further, 36% of the physicians, compared with 22% of the control group, were categorized as being in the "high drug use" groups, which included "heavy drinking or 'trouble with control of alcohol' " (19).

The study from which this paper is drawn examined alcoholic physicians who had successfully stopped drinking, who were not institutionalized, and, for the most part, were not under psychiatric care at the time of the study. There appear to be no other studies of physicians and alcoholic populations that are not currently in treatment and in which the disease is not active.

METHOD

American and Canadian male physicians who had grown up in the United States or in English-speaking Canadian families were selected for the study. All considered themselves alcoholics, were members of Alcoholics Anonymous (AA), and had been totally abstinent for 1 calendar year or more prior to interview. While we attempted to locate sober alcoholic physi-

cians who are not members of AA, we were unable to find a large enough number to provide comparability.

We located the subjects primarily through the cooperation of International Doctors in AA, a chapter of Alcoholics Anonymous limited to physicians and dentists[1] which holds an annual August weekend meeting in various parts of the United States. Other subjects were found through local AA groups. We also located several men who were practicing in small towns in the Carolinas and Georgia and were known to one another. Each willingly introduced the interviewer by telephone to the next physician down the highway.

In no case did an AA member give a physician's name without first obtaining his permission to do so. It is therefore possible that some of the reports that potential subjects were away on vacation or were ill may represent their refusal to be interviewed. We made no attempt to conduct a random sampling or develop a control group. Since considerations of time and geography made it impractical to visit many western and small communities, most of the interviews were conducted in eastern urban areas, frequently during medical conventions.

A 50-part questionnaire using some items modified from a previous study (20) was administered in a face-to-face interview with each of the subjects. The interviewer recorded all of the information with the exception of a checklist of symptoms of alcoholism, physical sequelae, and social sanctions experienced, which was marked by the subject.

All interviews were conducted during the period 1968–1970 and were solicited by the study team. While only 1 of the physicians approached actually refused to be interviewed, 3 others also refused, in effect, by engaging in delaying tactics and by making it extremely difficult to contact them.

RESULTS

Characteristics of the Study Population

The study resulted in 98 usable questionnaires. Table 1 compares the study population's distribution by field of practice to that of all U.S. physicians.

A striking proportion of the alcoholic physicians identified themselves as psychiatrists at the time of the interview, although in at least 3 cases the current field of practice was not the same as it had been at the time of cessation of drinking. Since the study population was not a random sample, the differences found may be related to sample variation or to differential rates of alcoholism among practitioners in the various fields. However, except for the field of psychiatry, the 2 groups did not appear to be distributed differently by field of practice.

Data on the study group's class standing in medical school also suggest that these physicians are not representative of the total physician population.

[1]Information may be obtained from the Secretary, International Doctors in AA, 1950 Volney Rd., Youngstown, Ohio 44511.

TABLE 1
Comparison of the Field of Practice of All U.S. Physicians and of 98 Alcoholic Physicians at the Time of the Interview, in Percents

Field of Practice	All U.S. Physicians*	Alcoholic Physicians
General practice	22	24.5
Internal medicine	14	13.3
Surgery	10	9.2
Psychiatry	6	17.4
Obstetrics and gynecology	6	9.2
Pediatrics	6	2.0
Radiology	3	2.0
Anesthesiology	3	4.1
Pathology	3	3.1
Ophthalmology	3	0
Orthopedic surgery	3	3.1
Other	21	12.3

*Data are from the American Medical Association (21).

Of the 84 physicians who provided data on this item, 45 (53.6%) reported that they were in the upper third of their class (including 19, or 22.6%, who were in the upper tenth), 34 (40.5%) were in the middle third, and 5 (5.9%) were in the lower third. Fourteen physicians stated that their medical schools did not report these rankings to their graduates; we checked with the schools of 4 of these physicians and found this information to be accurate.

A normal distribution would obviously have produced about one-third in each level. Again, we cannot ascribe the findings to either sample variation or to differences in an alcoholic population. However, the 2 distributions (field of practice and class standing) do suggest that the alcoholic physician may well be different from his nonalcoholic colleagues in characteristics other than his disease.

A total of 91 subjects were working full time as physicians. Five were semiretired due to reasons of health. One had retired completely (he was well into his 70s and had been abstinent for over 20 years), and another had left active practice to become a medical writer.

Twenty-one were holding formal teaching appointments in medical schools, although the colleagues and students of only a few knew that they were recovered alcoholics. They therefore did not share their experience with their peers. Several indicated that they would like to do so but were afraid of the stigma that might follow honest disclosure.

While only 1 consecutive year of total abstinence was required for inclusion in this study, the mean period of total abstinence was 7.4 years, with a range of 1 to 29 years.

Addiction to Other Drugs

As with groups in previous studies, our study sample also reported a high incidence of addiction to drugs other than alcohol. A total of 56 (57.1%) had

been addicted only to alcohol, 24 (24.5%) to alcohol and "soft" drugs, 4 (4.1%) to alcohol and narcotics, and 14 (14.3%) to all three.

We did not attempt to define "addiction" for the individual physician. If he considered himself to have been addicted to a given drug, his word was accepted. If, on the other hand, he expressed uncertainty as to whether he had merely used a drug or had actually been addicted to it, he was regarded as not addicted.

The category of soft drugs included sedative-hypnotics, tranquilizers, amphetamines, and volatile anesthetics. Codeine, whether used alone or with terpin hydrate, was included with the narcotics.

Table 2 presents data on the drugs other than alcohol to which the physician reported addiction. It should be borne in mind that since most of these physicians stopped using other drugs at the time they stopped using alcohol and that since many had been sober for years at the time of interview, this choice of drug reflects a pattern of use probably not typical of today's active drug abuser. For example, few of our subjects mentioned diazepam, which is probably the most frequently abused drug in our present patient population, and none mentioned methaqualone hydrochloride or pentazocine hydrochloride, although both are now frequently used by self-medicating physicians.

TABLE 2
Drugs of Addiction Other Than Alcohol Among 98 Alcoholic Physicians

Drug	Number*	Percent
Narcotics	18	18.4
Barbiturates	29	29.6
Amphetamines	17	17.3
Glutethimide	11	11.2
Meprobamate	8	8.2
Chlordiazepoxide	8	8.2
Chloral hydrate	7	7.1
Ethchlorvynol	3	3.1
Diazepam	3	3.1
Bromide	1	1.0
Gas and volatile anesthetics	1	1.0

*A number of subjects reported addiction to more than one drug.

TABLE 3
Admissions to Institutions for Alcoholism or Alcohol-Related Illness

Type of Facility	Number of Admissions (N=627)
General hospital*	359
Psychiatric hospital	132
AA rest farm	63
Sanitarium	60
Federal hospital	7
Mission, halfway house, and municipal shelter	6

*Includes Veterans Administration hospitals.

Treatment Experience

All but 22 of the subjects (22.4%) sought professional help for alcoholism or what they later recognized as alcoholism, and many sought help from more than one type of professional. They consulted psychiatrists more frequently than nonpsychiatric physicians (52 subjects, or 53.1%, versus 40, or 40.8%); in addition, almost one-third of the group (32, or 32.7%) approached the clergy.

Contrary to the popular impression that alcoholics do not remain in treatment, of those subjects who sought psychiatric help 37 (71.2%) stayed in treatment for 2 or more years and 15 (28.8%) for 8 or more years.

While many described their overall treatment experiences as helpful, they frequently complained that a professional helper had refused to identify or deal with the problem of alcoholism per se and had chosen to regard it as a symptom of some other underlying condition. Thirty-four men reported that the question of alcoholism had specifically been discussed between patient and therapist, only to have the therapist deny the fact of alcoholism. Since it is virtually impossible to arrive at a reasonable treatment plan for a disease whose existence is not acknowledged, this behavior had frequently resulted in dangerous delays in obtaining appropriate treatment.

Most of the study sample reported multiple treatment experiences as inpatients, outpatients, or both. A total of 77 (78.6%) were institutionalized 1 or more times, while 21 (21.4%) were not. Table 3 presents information on all admissions to institutions for alcoholism or alcohol-related illness regardless of the diagnosis officially recorded at the time. The total time these physicians spent in institutions during their 627 admissions was just under 39 years. (If one assumes that there are in fact over 5 million alcoholics in the United States today, and if the use of health care facilities reported by these physicians is accurate and typical of other alcoholics, the drain on the health care dollar is even more staggering than previously estimated.)

Medical Sequelae

In addition to the difficulties resulting from simple physical addiction to alcohol, the physicians also reported experiencing many of the common somatic complications of alcoholism (see table 4). Often these conditions required hospitalization. Several of the subjects stated that they received excellent physical care during inpatient treatment of these conditions but that they and their doctors tacitly agreed not to discuss the matter of alcoholism.

An additional physical hazard was presented by the subjects' tendency to use other drugs in an attempt to deal with the insomnia, agitation, and depression caused by excessive drinking. (The alcoholic physician frequently confused cause and effect and believed that his problems with sleep and his nervousness caused him to drink, rather than the reverse.) As the use of other sedatives increased, frequently in a setting

TABLE 4
Medical Complications of Alcoholism Reported by 98 Physicians

Complication	Number*	Percent
Gastritis	44	44.9
Peripheral neuropathy	19	19.4
Severe malnutrition	16	16.3
Fatty liver	14	14.3
Gastrointestinal bleeding	14	14.3
Peptic ulcer	10	10.2
Pancreatitis	5	5.1
Cirrhosis of the liver	4	4.1
Esophageal varices	1	1.0

*A number of subjects reported more than one type of complication.

TABLE 5
Professional Sanctions Experienced by 98 Alcoholic Physicians

Sanction	Number*	Percent
Admonished by colleague	58	59.2
Warned by medical society or licensing board	20	20.4
Lost hospital privileges	20	20.4
Lost medical license	8	8.2
Lost narcotic license only	1	1.0
Never sanctioned	33	33.7

*A number of subjects experienced more than one sanction.

of increasing alcohol use, the physician often became confused as to how much he was taking. Twenty-three men reported serious sedative overdoses, most of which were not felt to have been suicide attempts.

The physicians were asked specifically about any overt suicide attempts. No effort was made to distinguish between serious attempts and gestures. If a subject reported a self-destructive episode but was unclear as to whether he was consciously attempting suicide, we did not list it as an attempt. Fifteen subjects (15.3%) reported that they had made overt suicide attempts. Ten subjects (10.2%) had made a single attempt, 1 (1%) had made 2 attempts, and 2 (2%) each had made 3 and 6 attempts. Because of the criteria we used for listing a self-destructive episode as a suicide attempt, these data probably represent underreporting rather than the opposite.

Social Sequelae

Since it has been our experience that patients who are obviously seriously alcoholic often defend against diagnosis on the grounds that they are still able to work, we were particularly interested in the effect of alcoholism on the physicians' work performance.

We found that over half of the sample (53, or 54.1%) did not experience any obvious change in job status as a result of drinking. (This does not, of course, take into consideration the quality of work or volume of practice.) Among the 45 who did report work difficulties, 20 suffered periods of unemployment and 5 were forced to work outside the medical field altogether, 1 as a porter, another as a dishwasher, and yet another as a copier of blueprints. Of those who remained in medicine but reported a decline in work status, several reported that their careers were dramatically affected. For example, a chief of medicine at a major medical school took a series of locum tenens positions for general practitioners. A famous pathologist worked as little more than a laboratory technician for another physician. A neurosurgeon deprived of hospital privileges supported himself by doing routine physical examinations.

Many of the physicians experienced difficulty with the law, and many others stated that while they had never been arrested, they felt that they should have been but the police were often lenient when an erratic driver or boisterous individual was identified as a doctor. A total of 48 subjects (49%) had been arrested, 37 (37.8%) had been jailed, and 19 (19.4%) had lost their driver's license. Our sample of physicians accumulated a total of 219 arrests and 170 jailings.

Response of the Profession

Table 5 lists the professional sanctions experienced by the alcoholic physicians. Included under "admonitions" was any statement (informal or otherwise) made by a colleague or superior to the effect that drinking was perceived as a problem. It is therefore particularly telling that in one-third of these cases, nothing whatsoever had been said.

DISCUSSION

These 98 alcoholic physicians were probably clearly visible to the general public and to their colleagues. The public response to their behavior, as represented by arrests, jailings, and loss of driver's license, occurred more often and with a larger number of formal indications of disapprobation than did the professional response, as represented by warnings from medical societies and licensing boards, loss of hospital privileges, and actual loss of license.

That the public was more aggressive in its response than was the medical profession raises issues about the self-regulation of colleagues by a professional group. Arrests and jailings are not actions lightly undertaken by police in response to a transient action by a physician. Police are frequently reluctant to arrest the more prominent and respected citizens of a community. Several of the subjects stated that while they had not been arrested, they felt they should have been.

It is noteworthy that many of the physicians stated that their alcoholism had never resulted in injury to their patients. Although this feeling is often shared by the colleagues of alcoholic physicians, it is a view that is difficult to accept. Since alcoholism interferes in so many ways and with such a multiplicity of functions, there can be little doubt that the patients of an alcoholic physician receive a lesser level of care than that physician is able to deliver when he is sober. The question

of injury to the patient is much more subtle, although the probability that such injury occurs is much more likely than the alcoholic physician is able to recognize.

The medical field has recently (22, 23) been willing to acknowledge that its members are not immune to problems of alcoholism, addiction, and mental illness and to move toward the development of legislative and administrative means to protect them from doing harm or being harmed. One hopes that other professional groups will follow this lead.

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REM Sleep and Adaptation of Psychiatric Patients: An Application of Sleep Studies

BY RAMON GREENBERG, M.D., AND CHESTER A. PEARLMAN, JR., M.D.

The authors used sleep laboratory data to predict responses to psychiatric treatment. The predictions were based on the assumptions that REM latency reflects the need for dreaming and therefore the need for adaptation and that REM time reflects the capacity for the adaptive work associated with REM sleep. Dream recall and dream content were considered indicators of psychological mindedness and the patient's current conflicts. With this material, statistically significant predictions of such outcomes as good response to psychotherapy, elopement, or need for medication were made. The results of this study support the hypothesis that REM sleep is involved in adaptation.

SLEEP STUDIES of various clinical disorders have generally failed to reveal patterns specific enough for diagnostic use. The most notable exception is the study of narcolepsy (1). The present investigation differs from naturalistic studies in that our approach is based on the formulation that one function of REM sleep is the integration of new, emotionally meaningful experiences with earlier, similar experiences in the service of psychological adaptation.

Two previous studies (2, 3) showed that variations in REM latency and REM time could be predicted from the mental state of a patient before and after sleep. (REM latency is the number of minutes of sleep from sleep onset to the first occurrence of REM sleep; REM time is the number of minutes of REM sleep during the night, or the percent of sleep that is REM.) Our assessment of mental state involved scoring material for a variable we called "defensive strain." The measure of defensive strain included assessment of ego-dystonic affect, efficiency of defensive operations, and prominence of threatening self-other fantasy constellations. We predicted and found that high defensive strain before sleep was associated with shorter REM latencies and that changes in defensive strain from evening to morning were correlated with REM time (fall in strain was correlated with higher REM time and rise in strain with lower REM time). These predictions were based on the idea that high defensive strain reflects a need for the adaptive work hypothetically associated with REM sleep.

In the present study we tested the following corollary assumptions of our previous studies: 1) REM latency reflects the degree of defensive strain (need for adaptive work), and 2) REM time reflects a patient's capacity to integrate emotionally arousing experiences. In other words, the pressure to dream (REM latency) reflects the need to integrate experiences, and the amount of REM reflects the ability to accomplish the task. In addition to the sleep physiological data, we collected dream reports at the end of REM periods. Although the normal subject has about 80% dream recall after REM awakenings, we had found considerable variability among patients. We felt that dream recall reflected the patient's attitude toward his inner life. Thus, presence or absence of recall could be an index of psychological mindedness. Finally, we also felt that the nature of the dream content might give some indication of the issues with which the patient was struggling and of his methods of coping with them. Therefore, we expected that REM measurements and dream reporting would be useful in predicting some aspects of a patient's response to hospitalization. For example, would he be accessible to psychotherapy, would he react negatively to the hospital and elope, or would he need medication before being able to deal with his problem?

METHOD

Forty-four male inpatients were selected for study. We studied any patient admitted to the psychiatry service of the Boston Veterans Administration Hospital who would agree to spend two nights in the sleep laboratory during the first two weeks of admission. Our technician first asked the physician of each new patient and the nursing personnel for permission to discuss the project with the patient. The technician then explained the study to the patient and obtained his agreement to participate. We never saw the patients or heard anything about their histories. Each patient spent two nights in the laboratory, usually within three days of each other. The first night of sleep was recorded without any awakenings. If a patient happened to awaken and mention a dream, his report was recorded.

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On the second night, awakenings were made at the end of each REM period,[1] the presence or absence of dream recall was noted, and dream reports were obtained if the patient was able to present them. The only questions asked by the technicians were: Were you dreaming? Was anything going through your mind? and Could you tell more about it?

Each record was scored twice for REM and non-REM (NREM) sleep. The results were tabulated for REM latency, REM time, REM percentage, and total sleep. The tape recordings of the patients' accounts of their dreams were transcribed. These were the only data provided to us; we made our predictions independently after studying these data. The following guidelines were developed for the predictions:

REM latency. 1) Short latency (less than 40 minutes) would suggest high defensive strain and therefore a subjective feeling of distress in the patient and a need for some resolution, e.g., by psychotherapy, medication, or leaving the hospital. (Short REM latency might also be due to withdrawal from a REM-suppressing drug, e.g., alcohol; the scorers would not know this information.) 2) A long REM latency (more than 100 minutes) would suggest low intensity of factors involved in defensive strain. Therefore, whatever the patient might be feeling was not ego-dystonic, and motivation for therapeutic efforts would be minimal.

REM time. 1) Low REM time (less than 40 minutes or 15%) would suggest that the patient lacked the capacity or need to integrate current experiences with the earlier conflicts these experiences stirred up, either because he was overwhelmed and could not sleep well or because he lacked the ego structures necessary for this task. In either case, he would probably not be able to make use of psychotherapy, although treatment with tranquilizing drugs might change the picture. 2) Average REM time (40–100 minutes or 15%–30%) would suggest that the patient was able to integrate emotionally meaningful experiences and to reconstitute defenses. 3) Unusually high REM time (more than 100 minutes or 30%) might represent drug withdrawal or remission following an acute psychotic episode.

Dream material. 1) Poor recall from REM awakenings would suggest a reluctance to recognize or think about psychologically meaningful material. 2) Clinical judgment was used for assessment of the dream material. For example, dreams incorporating the hospital experience might suggest the capacity to become involved with the hospital and to attempt to deal with the experience. The patient's interactions in the dream might give some clues about issues with which he was currently concerned, such as running away from the hospital or talking with the doctor.

With these guidelines, the following predictions were made:

1. Patient will be accessible to insight-oriented psychotherapy. He will become involved in exploration of his problems and show behavioral alterations resulting from the therapy relationship. (Low to average REM latency reflects subjective distress and need for change; average to high REM time reflects ability to integrate experiences; and good dream recall with evidence of current conflicts reflects capacity to introspect.)
2. Patient will reject attempts to help. He will leave the hospital by signing out or eloping, claiming that the hospital upsets him or that he does not need help. (Low REM latency reflects subjective distress and need to change; low REM time reflects poor ability to integrate experiences; and poor dream recall or dream content suggests flight.)
3. Patient will need medication before he can make use of help. (Sleep so fragmented that REM measurements are meaningless, or low REM latency and low REM time, but better dream recall and content, are more suggestive of accessibility to treatment than in prediction 2.)
4. Patient will reconstitute rapidly and establish his characteristic defensive patterns. (Average to high REM latency reflects little inner distress or need to change; average to high REM time reflects ability to integrate precipitating stress; and, although dream recall is low, recalled material suggests institution of defenses.)
5. Patient will stay in the hospital and develop a dependent relationship or return to a similar situation at home. (Average to high REM latency reflects not much distress; average to low REM time reflects not much capacity for integration and a need for external support; and dreams suggest strong, ego-syntonic dependency.)

The patients' charts were not consulted until after we had read their sleep records and made our predictions. We waited for at least two months and as long as six months after the patients' admissions in order to have a clear picture of the actual course of their hospitalizations. In most cases the outcome was unequivocal. When there was any question, such as the relative role of drugs versus psychotherapy, we arrived at consensus by careful discussion of the material in the chart.

RESULTS

When the outcomes were examined, all five predicted hospital courses were well represented (range, 5–15). Thus, our chances of predicting any outcome were between 1 in 3 and 1 in 8. Because of differences in sleep measurements between first and second nights or differences between the sleep measurements and the dream material, we sometimes made predictions of two possible outcomes. Our chances of being right in this case became about 2 in 5. We scored our predictions as plus (+) if the prediction precisely coincided with the outcome, plus/minus (±) if 1 of 2 predictions

[1]The end of a REM period was defined as the first appearance of a sleep spindle without evidence of continued eye movements or three minutes of waking following a REM period. Awakenings were within three minutes of the end of a REM period.

TABLE 1
Outcomes for 44 Inpatients by Predictions Made by 2 Scorers

Outcome	Number Predicted To Have Outcome by Scorer 1*					Number Predicted To Have Outcome by Scorer 2*				
	1	2	3	4	5	1	2	3	4	5
1. Patient is accessible to psychotherapy (N=15)	4	0	0	2	5	10	0	1	1	2
2. Patient rejects attempts to help (N=8)	0	1	0	3	2	2	3	0	1	0
3. Patient needs medication (N=5)	0	1	2	1	1	1	1	2	1	0
4. Patient reconstitutes rapidly (N=11)	1	2	0	5	1	1	0	2	3	1
5. Patient develops dependent relationship in the hospital or returns to one at home (N=5)	1	0	0	0	2	2	0	1	0	2

* For prediction 1, scorer 1 also had 4 plus/minuses; for prediction 2, 2; for prediction 3, none; for prediction 4, 2; and for prediction 5, 2. For prediction 1, scorer 2 also had 1 plus/minus; for prediction 2, 2; for prediction 3, none; for prediction 4, 4; and for prediction 5, none.

TABLE 2
Expected Correct Predictions Versus Actual Correct Predictions for 2 Scorers

Outcome	Predictions of Scorer 1*		Predictions of Scorer 2**	
	Expected	Actual	Expected	Actual
1. Patient is accessible to psychotherapy (N=15)	3.409	6	5.795	11
2. Patient rejects attempts to help (N=8)	1.091	2	1.091	4
3. Patient needs medication (N=5)	.227	2	.682	2
4. Patient reconstitutes rapidly (N=11)	3.250	6	2.500	4
5. Patient develops dependent relationship in the hospital or returns to one at home (N=5)	1.477	3	.568	2
Total	9.454	19	10.636	23

*χ^2=12.25; p<.02.
**χ^2=19.028; p<.001.

coincided with the outcome, and minus (−) if the outcome differed from our predictions. With this scoring method, one of us had 14 pluses, 20 minuses, and 10 plus/minuses, and the other had 20, 17, and 7, respectively.

Table 1 shows the distribution of predictions and outcomes for each scorer. Using these results, we prepared table 2 to show the distribution of expected outcomes[2] as compared with predicted outcomes. (For statistical purposes, plus/minus scores were randomly assigned to either minus or plus categories.) This was done for each outcome for each scorer. Chi-square analyses were then computed; these showed that the predictions were significant (see table 2). The reliability of scoring was assessed by comparing the predictions of the two scorers irrespective of the correctness as measured by outcome. On this basis there was no agreement in 12 of 44 predictions, complete agreement in 24 of 44, and 8 in which one or both scorers gave 2 predictions and 1 of them coincided. Thus, predictions for 73% of the patients were either completely or partially in agreement.

We also examined the data to see whether REM latency or REM time by themselves would have any predictive value: we found no significant relationship to any particular outcome. It is of interest, however, that 9 of 15 patients with good dream recall (more than 2 REM awakenings with 2 or more detailed dreams reported) were in outcome 1, accessibility to psychotherapy, but only 6 of 29 patients with poor recall responded to psychotherapy.

The patients who represented exceptions to dream recall as a predictor are also instructive. One patient had poor dream recall, but the one fragment he reported involved his family. His REM latency and REM time were predictive of a good response to psychotherapy, and he made good use of psychotherapy. On the other hand, one patient who recalled three of five dreams had outcome 4, rapid reconstitution. His dream content indicated a great deal of embarrassment about revealing himself. Thus, it appeared that using all of the data increased our ability to predict outcomes.

Some clinical examples of our successful and unsuccessful predictions can illustrate the use and problems of this kind of assessment. One patient had short REM latencies and moderately high REM time (25%). On four REM awakenings, he recalled three dreams whose content indicated his longings. Our prediction was that he should be able to work in psychotherapy. The chart revealed that the initial diagnostic impression was that the patient was a sociopath and a chronic alcoholic. This patient surprised the staff by becoming involved in treatment, requesting disulfiram (Antabuse) and working on problems in his marriage; improvement occurred over a period of months.

Another patient showed short latencies and high REM (157 minutes one night). He had poor recall of dreams, remembering only a fragment that involved taking an airplane to Hawaii. His sleep measurements suggested internal pressure and an attempt to deal with

[2]"Expected" is the statistic calculating what might occur by chance given the uneven numbers of outcomes and predictions.

this by high REM. His dreams suggested repression and flight. One of us relied primarily on the sleep measurements and predicted that the patient would get involved in psychotherapy. The other felt that the paucity and content of the dream material outweighed the high REM time and predicted that the patient would reject attempts to help him. The chart revealed that the patient had had a psychotic break and had been hospitalized for 10 months before coming to our hospital. He was diagnosed as not psychotic and left the hospital having gained no insight after 3 weeks.

Another patient had very long REM latencies and average REM time. He recalled only a fragment on one of two REM awakenings. We predicted that this patient would reconstitute his usual defenses and not get involved in psychotherapy. He improved after an acute schizophrenic episode with the help of chlorpromazine (Thorazine) and was discharged, off medication, in 2 weeks.

DISCUSSION

We have described how sleep data alone enabled us to make fairly accurate predictions about whether a patient would make use of psychotherapy, would reject efforts to help him, or might need medication before he could enter into treatment.

The reliability of our scoring deserves comment. Although our directions for scoring were quite explicit, occasionally we could make entirely different predictions from the same data. One cause of this phenomenon was a discrepancy between dream material and the physiological findings. In one case low REM latency and high REM time suggested accessibility to psychotherapy but the dream material showed evidence of a greal deal of repression. Other causes were differences in REM measurements between first and second nights or borderline values between two predictive categories. Thus, the laboratory results are at times equivocal and lead to differing predictions.

Some additional possible reasons for our inaccurate predictions also deserve mention. Many of these will be obvious to the experienced clinician. For example, although the laboratory results suggested a favorable outcome with psychotherapy, the patient might have had a therapist to whom he could not relate well. Conversely, a patient who appeared inaccessible to therapy might have found just the right person for establishing a therapeutic relationship. Withdrawal from alcohol or drugs (of which the scorers were unaware) might lead to high REM times and an inaccurate prediction of capacity to use psychotherapy. Conversely, even when sleep was not obviously fragmented, psychotropic drugs might have reduced anxiety and thus increased REM time, resulting in greater benefit from psychotherapy than we had predicted.

A study by Gillin and associates (4) illustrates this last situation. They found that acute schizophrenic patients deprived of REM sleep showed no REM rebound until the third recovery night, although REM latency was shorter on these nights for the schizophrenic patients than for a nonpsychotic control group. To us, these findings suggest impaired capacity to respond with increased REM in the acute schizophrenic patients despite increased REM pressure (short latencies). However, schizophrenic patients who were receiving phenothiazines showed more rebound than untreated patients. Phenothiazines might therefore improve the capacity for REM sleep through direct effects on the chemical pathways involved in REM sleep or indirectly by influencing the psychological state of the patient.

In another study, Reich and associates (5) presented correlations of REM latency and REM activity with response to drug treatment in a series of schizophrenic patients. They found REM measurements to be useful in predicting response to phenothiazines and in identifying patients who required antidepressant medication. In both Reich and associates' study and ours, sleep laboratory data were viewed as an aid to predicting patients' responses to treatment. Although clinicians have other methods for making such assessments, we feel that such data, when available, can improve treatment planning.

Of additional importance is the idea that sleep patterns in psychiatric patients should be seen as a reflection of underlying processes rather than as symptoms to be treated in isolation. REM latency, REM time, and dream recall and content can be used as indicators of the psychological state of the patient independent of the clinical diagnosis. Although not readily available, this method may find application for some psychiatric patients and also illustrates how a clinical study may be helpful in testing theories, in this case that REM sleep plays a role in adaptation.

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Atypical Facial Pain as a Defense Against Psychosis

BY JOHN F. DELANEY, M.D.

The author describes three women who presented psychotic symptoms 24–48 hours before scheduled neurosurgical procedures for atypical facial pain; all had had extensive dental reconstruction and attempted nerve blocks with no relief. Psychiatric hospitalization and administration of major tranquilizers resulted in control of symptoms and relief of pain. Two patients were followed for a year and have had no return of psychiatric symptoms or facial pain; both have been maintained on medication and have returned to normal activities. The author suggests that the facial pain may have served as a defense against the emergence of psychosis.

THERE HAS BEEN great interest in the possible psychological and organic causes of atypical facial pain since Frazier and Russell (1) first differentiated such patients from the larger group of individuals with characteristic trigeminal neuralgia. Glaser (2) and others believed that psychoneurosis could be the causative factor in atypical facial pain. Wilson (3) pointed out that in some cases the behavioral and personality changes were out of proportion to the symptoms. He noted that many of these people had similar personality types and considered the pain to be an externalization of conflictual material. More recently, Dalessio (4) discussed the role of depression in head and facial pain; several such patients have also been described by Gallemore and Wilson (5). Engel (6) has suggested that atypical facial pain is a conversion symptom.

In this paper, I will not reexamine previous hypotheses regarding atypical facial neuralgia; rather, I will present the idea that this pain may be a defense against psychosis. The three cases I will describe have several factors in common that support this hypothesis.

CASE REPORTS

Case 1. Ms. A, a 44-year-old single woman, had complained of left-sided facial pain for 3 years before her hospitalization. The pain was described as gradual, boring, and dull, eventually migrating to the entire left side of the face and then to the right side. At first, she was able to obtain relief with simple analgesics. When the pain became persistent, she consulted dental surgeons, who removed decayed maxillary teeth bilaterally.

The extractions brought her relief for approximately three months, after which time her original symptoms returned and the pain became severe and unrelenting. A consultation with oral surgeons revealed a possible malocclusion and the patient was given braces. Narcotics were prescribed for pain and barbiturates for sleep. When she experienced no relief, she became angry and belligerent toward her employer and customers as well as her physicians. She began to abuse narcotics and used heavy doses of barbiturates. After X-rays revealed mild temporomandibular arthritis, she underwent bilateral condylectomy, which relieved her pain for approximately 4 months. She continued to use narcotics and barbiturates but in smaller doses and was able to function at work.

Several months after the condylectomy, Ms. A again experienced bilateral facial pain, this time of a boring nature with no specific radiations. She was referred to the Pain Clinic at the University of Pittsburgh School of Medicine and received bilateral trigeminal nerve injections. She increased her use of narcotics and barbiturates to the point of severe addiction, missed a great deal of work, and was in danger of being fired. Her physicians felt that she should be admitted to the neurosurgical service for a definitive pain procedure, and a left posterior fossa exploration of the trigeminal nerve was planned.

In the hospital, Ms. A was uncooperative and belligerent. She fought with nursing staff when they refused to give her narcotic medication in the dose that she had been taking at home. On the day before the scheduled surgery, she was angry and moderately depressed and talked openly of suicide if the surgical procedure was not of benefit. That evening, she was combative, confused, and disoriented and seemed to be hallucinating. She was transferred to a psychiatric hospital and treated with major tranquilizers. Approximately 6 days later, she experienced remission of her psychosis and complete relief of her pain.

During the course of her psychiatric admission, the patient was found to be more angry and more depressed than she had been before. She was the youngest child in a family of four significantly older siblings. Her mother was deaf by the time the patient was 7 years old and her father, whom she described as a handsome, successful businessman known about town for his extramarital affairs, was away from home often. Although the mother knew of his affairs, she attempted to deny them. The patient idolized her father and was unaware of his affairs until she was 12 years old, when she discovered a card sent to him by another woman. She showed the card to her mother, and soon after a confrontation the parents separated and subsequently divorced. Shortly after the divorce, her father announced that he planned to marry the patient's second cousin, who was only 10 years older than Ms. A. Her mother became quite upset and was hospi-

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talized for depression. Ms. A was immediately placed in a girls' school in another state, where she had little contact with her parents. She became isolated and lonely and turned to other girls for companionship, later entering into a homosexual relationship with a teacher who, she felt, treated her in a motherly way and supplied many of her affectional needs.

After graduation, Ms. A obtained a position as an airline stewardess and became quite successful. During this time, she had an affair with a man who reminded her strongly of her father. She became pregnant, but the man was married and refused to leave his wife. Ms. A took a leave of absence and returned to her family home. Both of her parents suggested that she have an abortion, but she refused on religious grounds. Her mother consented to keep her at home if she agreed not to show herself outside the house. Relatives and neighbors were told she was away on vacation. At the time of delivery, she went to a hospital in another area under an assumed name. Arrangements were made for the child to be adopted. However, after she convinced one of the nurses to show her the baby, a healthy male child, she had second thoughts. Her father persuaded her to go through with the adoption.

When she returned to work, she met a woman her age—an alcoholic nightclub singer, who became her roommate and then her lover. Ms. A soon discovered that her roommate was seeing other women; eventually her roommate left her for another woman. Ms. A became severely depressed; she coped with her depression by involving herself in a homosexual community, where she had no serious relationships. She suddenly developed severe jaw and mouth pain and consulted a dentist, who restored several carious teeth. This pain was similar to that which eventually led to her hospitalization but disappeared when the patient became seriously involved with another airline stewardess, who was an alcoholic. This relationship ended much as the previous one had, and the jaw and dental pain returned.

The patient was promoted and left flying status to return to her native city. She established herself in a homosexual community and developed two more serious relationships with alcoholic women, which ended like the earlier ones. She was hospitalized for a definitive pain procedure during another serious relationship with an alcoholic woman who physically abused her. When Ms. A ended the relationship because of her lover's drinking, the pain became so severe that she considered a definitive procedure. In subsequent interviews, it was discovered that the patient's father had died as a result of alcoholism.

Case 2. Ms. B is a 60-year-old woman who presented to the neurosurgical service for posterior fossa exploration for left trigeminal neuralgia. She had had left-sided facial pain for 3 years, beginning with sharp intermittent pain over the V_2 and V_3 distribution. The pain gradually became constant and radiated over the entire left side of her face. She was seen by physicians at several neurologic centers and was placed on diphenylhydantoin without significant results. Later she was given carbamazepine, which produced little relief and caused depression in her peripheral white cell count. Ms. B was referred to an oral surgeon, who removed the left mandibular teeth and resected the left lingular nerve. She still had mandibular pain that now radiated into her lower lip as well as over the entire left side of her face. She also complained of extreme sensitivity in her mouth and was unable to wear her bridgework. Physicians at the Pain Clinic attempted to inject the trigeminal nerve, but this gave the patient no relief. Ms. B was addicted to barbiturates for sleep and lost 22 kg because of her poor eating habits. Just before the facial pain started, she had undergone a left radical mastectomy for carcinoma; she was 5 years postoperative at the time of admission and free of metastatic disease.

On the night before her scheduled pain surgery, a resident found Ms. B in her room with her arms folded across her chest. She said that she was dead and wanted her husband to be at her funeral. She was disoriented, confused, and grossly hallucinating. She was transferred to the psychiatric hospital and treated with major tranquilizers. The psychotic symptoms disappeared within two days, and she did not complain of facial pain while on medication.

History revealed that Ms. B had led a very sheltered life, protected by both parents from even minimal stresses. When she was in her twenties she married a man several years older. She never assumed any responsibility for making decisions in the marriage, and her husband also assumed much of the responsibility and care for their three children. During the last 6 years of their marriage, the husband had a senior executive position and made many trips away from home. At this time, the older children were married and the youngest son was at school. The patient was alone for long periods of time and was unable to make any decisions concerning even minor household tasks without consulting her husband or family. She turned to club work and to organizations where she could spend most of her days in structured activities.

After the mastectomy, Ms. B was confined at home for a long time and spent most of her recuperative period alone. The facial symptoms were first noted at this point. When the facial symptoms recurred 5 years later, the patient was again able to regain family interest and concern and her husband and children were obliged to spend more time with her than they had previously. There was no indication of childhood or adolescent facial symptoms.

Case 3. Ms. C, a 56-year-old woman, was transferred to the neurosurgical service for posterior fossa exploration of the left trigeminal nerve. The patient gave a 3-year history of left-sided facial pain, primarily in the V_2 and V_3 distribution, which gradually became generalized to the entire left side of her face. The pain was throbbing at first and then became constant. She soon began to use narcotic medication during the day and barbiturates at night. A number of dental surgeons had recommended that most of her lower teeth be extracted. This provided temporary relief, but the pain resumed several months later. The upper teeth were then extracted, with similar results. Most of the time she was unable to wear her dentures. Ms. C was followed in another city and had a series of nerve blocks, all without results. Because of the progression of the pain, she was transferred to the neurosurgical service for a definitive procedure.

On admission, she appeared to be very pleasant and got along well with the house staff and nurses on the neurosurgical unit. She expressed interest in the procedure and hoped it would end her pain. The night before the scheduled surgery, Ms. C began talking to the nursing staff and others about her family. She said that she and her husband had been married for many years but had never been close. Her husband had been a long-distance truck driver and was known to have frequent affairs; Ms. C felt this was simply an "occupational hazard." She had always been faithful. They had two daughters, the older of whom became pregnant a year before the patient's facial pain began and married against her parents'

wishes. After the daughter's marriage, Mr. C had a myocardial infarction and had to quit driving and take a less lucrative job in the office. It was necessary for Ms. C to go to work as a waitress in a local restaurant.

Although she had established some degree of closeness with her daughter and son-in-law, Ms. C felt that she had never really forgiven her daughter and blamed her for Mr. C's myocardial infarction. The day her surgery was scheduled was the birthday of the second daughter, who was now the same age the older daughter had been when she became pregnant. The night before the scheduled surgery, Ms. C was confused, crying, agitated, and hallucinating. She believed that she had killed her husband and her granddaughter. She was transferred to a psychiatric hospital where she was treated with major tranquilizers for one day and then was transferred to a hospital in her home city at her family's request. Follow-up revealed a 2-month hospitalization with continued administration of major tranquilizers and complete remission of psychosis. Six months after discharge, she had had no further incidents of the facial pain.

FOLLOW-UP

Ms. A and Ms. C were followed for 18 months after their initial hospitalizations and have continued taking major tranquilizers and antidepressants, with no recurrence of the facial pain. Ms. B went out of the country on vacation with her husband and did not take her medication for approximately 30 days. The facial pain returned, but not with its initial severity. When she resumed her medication, the facial pain disappeared and has been in remission since that time. Ms. C was not followed directly, but reports from her physician indicated that she had had no further complaints of facial pain. Ms. A and Ms. C have had no further treatment of the facial problems other than normal dental care and have been able to tolerate repair of carious teeth and prophylaxis. They are now seen twice a month for half-hour interview sessions. The therapy is supportive and semidirective and the patients know that they can contact their physicians if necessary. Neither patient has expressed any interest or concern about recurrence of the pain or about medical or surgical therapy.

DISCUSSION

The three patients I have described are similar in many ways—all are women over 40 who had facial pain for several years and underwent multiple oral surgical or medical treatments. Treatment usually provided brief periods of relief, but symptoms returned rapidly. In case 1, symptoms were related to increases in stress.

All of these patients had striking psychopathology in their histories. Ms. A's history included overt orality and unresolved oedipal conflicts that were reflected in the patterns of her adult life. Her facial pain emerged when these patterns were unable to meet her needs. The patient could not focus her attention on the pain, which served as an "emergency discharge" (7) for tensions raised by more serious intrapsychic conflict. The pain provided a rational basis for her expressions of anger and bitterness.

Simultaneously, Ms. A achieved relief of guilt by using her discomfort in a self-punitive way. The pain then served to mediate the delicate balance between function and complete ego disintegration. In order to ensure the validity of the defense, she had to search continuously for a cure for her discomfort. Temporary reinforcement brought about temporary relief, but surgery threatened this balance and ensured complete ego destruction. Even the threat of surgery was sufficient to produce an overt psychiatric episode: reintegration was rapid once the threat was removed.

Similar mechanisms are involved in the case of Ms. B, whose extreme dependency was no longer satisfied when her children left the home and her husband's job required him to be away much of the time. Her inability to adapt was further stressed by her mastectomy, which added a physical limitation to the system. Her internalized fear of dying was then externalized as an actual life-threatening disease. The resurgence of input from her family, who rallied around her during her illness, temporarily maintained her ego balance. As she improved, family members withdrew their attention and returned to their own activities, leaving the patient to cope with her inadequate defenses. She soon developed the facial pain which, as in case 1, lasted as long as the balance was not disturbed. When surgery threatened to remove the pain, ego disintegration occurred. Again, reintegration was rapid when the threat was removed.

In the case of Ms. C, the pain served to drain off tension resulting from the family structure. The past infidelity of Ms. C's husband, his myocardial infarction, and her daughter's pregnancy all proved to the patient that she was worthless. She could not allow herself to feel anger for fear of complete loss of her family. The pain established value in her life; by constantly rising above it, she gave some credibility to her existence. The increasing frequency and severity of the pain were directly correlated with the approach of the younger daughter's birthday and the fear that the older daughter's situation would be repeated. When threatened with removal of the escape valve (her pain) by surgery, the system gave way to overt psychotic behavior.

In all three cases, the facial pain became the major symptom of the underlying psychopathology. As long as this symptom held and could be compartmentalized, the patients continued to function. The defensive nature of this symptom became evident when there was a major attempt to remove it surgically. Constricted ego function with little latitude for movement is suggested in all of these cases. The pain represented the major symptom of the disturbance and served as an emergency discharge that prevented disintegration. When threatened, the entire defensive structure collapsed and the psychosis emerged. There can be little doubt from these histories that the patients' psycho-

pathology had existed long before the facial pain appeared.

CONCLUSIONS

In this paper, I have described three cases in which I believe the major intrapsychic conflicts were expressed by atypical facial pain. Orality was a major feature of the psychic structures of these patients, and it is interesting that a facial symptom was chosen for its expression. The pain was the major presenting complaint of the underlying emotional disturbance, and the threat of its removal caused overtly psychotic behavior to surface. Treatment with antipsychotic drugs and psychotherapy resulted in disappearance of the psychotic symptoms and when reintegration occurred there were no further complaints of pain. However, when therapy was discontinued for a brief period in case 2, the symptoms began to return.

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Lead and Hyperactivity. Behavioral Response to Chelation: A Pilot Study

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Lead-chelating medication was used to treat 13 hyperkinetic school children whose blood and urine lead levels were in an elevated but "nontoxic" range. Six children with histories of etiologically relevant perinatal or developmental complications showed relatively little improvement. Seven other children with unremarkable histories, and for whom a lead etiology could thus be entertained, showed marked improvement. The authors conclude that lead may play an important role in the etiology of some cases of hyperactivity; lead-chelating agents may have a major place in the treatment of hyperactivity; and the medical workup of hyperactivity should include lead level measurements and careful consideration of other possible etiological factors.

VARIOUS TOXINS existing (and increasing) in the environment have deleterious effects on the central nervous system (CNS) that may range from severe organic destruction to subtle brain dysfunction (1–3). In an earlier report (4) we drew attention to the presence of raised levels of lead among hyperactive school children. Approximately 50% of those whom we examined had lead levels in an elevated but "nontoxic" range (25–40 μg/100 ml of blood). A more recent study (5) indicated that when a likely cause for hyperkinesis existed (other than a lead-related one), lead levels were significantly lower than in those children in whom there existed no known likely cause for the hyperactivity. These studies lend weight to a hypothesis that states that chronically elevated but "nontoxic" lead burdens may be directly etiological in some cases of hyperactivity.

In order to explore this hypothesis, we are using chelating medication in the treatment of hyperactive children with elevated lead levels. If these high levels are causally related to hyperactivity, lowering them should ameliorate the condition. This preliminary report derives from the previously cited study. Drawing on the first 13 children to complete that treatment regimen, we compared the effects of deleading in the following two groups: 1) those children in whom a probable other cause for hyperactivity existed (as a group they usually show normal lead levels, but exceptions obviously exist), and 2) those children in whom there was no other known cause for hyperactivity. If an elevated lead level is etiological in some cases of hyperactivity, deleading should be most effective in the latter group. We assert this because they have no other known cause for hyperkinesis in their history, and as a result only lead remains as a possible etiology. Deleading therefore relates directly to the only "cause" in this group. In the probable-cause group, the other nonlead-related etiology remains after the deleading and will continue to exert its effect. Therefore only minimal alteration in hyperactive behavior is to be expected in this group.

METHOD

Subjects

The children in this series were referred to our unit for the diagnosis and treatment of hyperactive behavior. At the initial interview the purpose and scope of the research project was carefully explained to the parent. If the parent agreed to participate, formal written consent was obtained.

Acceptance into the research protocol required the establishment of a diagnosis of "hyperactive reaction of childhood." The reports of 3 observers—the child's teacher, parent, and doctor—were used. These reports and the manner of utilization were described in an earlier report (4).

Lead Levels

Admission to the research protocol required an elevated body lead burden defined as greater than 25 μg/100 ml of blood and/or 80 μg/liter of urine in a chela-

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tion-provoked specimen. Methods of collection and the analytic methods used were also described in an earlier report (4).

Etiological Determinations

The intake procedure included a detailed medical history of the mother's pregnancy and delivery and the subsequent history of the child. On the basis of these, a judgment was made as to the presence of etiologically relevant events that alone might account for the child's hyperactivity. Children were classified according to whether there was evidence of a perinatal or developmental trauma known to affect the development and/or functioning of the CNS, e.g., birth weight of less than 2.27 kg or meningitis. On this basis 6 children were found to have a probable cause in their history. Seven children were considered to have no known probable cause. The reliability of this categorization scheme has been reported elsewhere (5).

Intergroup Differences

The relevant characteristics of the 2 groups are as follows. They ranged in age from 6 to 10½ years (mean = 8.2 years). There was no meaningful difference in age between the 2 groups. There were 2 girls among the probable-cause children and none in the other group. While there appeared to be no differences in urinary lead levels, blood lead levels were lower for the probable-cause children (22.5±6.4 versus 29.2±5.9). This difference is consistent with previous results indicating that lead levels are lower among children for whom other probable etiologies can be posited (4, 5).

Procedure

The treatment protocol for all children lasted 12 weeks. Active chelating medication was given for the first 4 weeks and discontinued for the following 4 weeks. If blood and/or urine lead levels available at the eighth week visit were at or above the intake level requirement, the child was given a second 4-week course of treatment with chelates. Otherwise, no additional chelating medication was used.

Two chelating medications, penicillamine and calcium disodium edetate (CaEDTA), were used. All children who were not known to be allergic to penicillin were given penicillamine in capsule form, prescribed at a fixed dose of 250 mg twice a day. Two children, 1 from each group, were allergic to penicillin. No penicillamine was used in these cases. They were both hospitalized in the Clinical Research Center at the State University of New York, Downstate Medical Center, for the first 4 days of the 12-week treatment period, during which time they received the following: one intramuscular dose of 50 mg/kg of CaEDTA and, for the rest of the hospital stay, an oral dose of 500 mg of CaEDTA twice a day. On discharge, they were treated with oral doses of 500 mg of CaEDTA twice a day in exactly the same fashion as the penicillamine-treated children. In addition to receiving chelating medication, 4 children (1 in the no-known-cause group and 3 in the probable-cause group) were also given methylphenidate throughout the entire 12-week treatment period. They were started on a very low dosage (5–10 mg/day) to minimize side effects and thereafter were treated according to the order of the treating physician, up to 40 mg/day.

The assessments presented are those obtained during a drug-free baseline period and those taken at the end of the 12-week treatment period. The following scales were used: A teacher rating scale (6), a parent symptom questionnaire (7), a hyperactivity checklist (8), and a clinical global impression scale (9).

RESULTS

Figure 1 presents the mean blood lead levels for the 2 groups over the 12 weeks of treatment. As can be seen, there was a sharp drop for both groups by the end of the 4-week treatment period. This occurred in every child. When the medication was removed, blood lead levels rose, approaching but not reaching the baseline levels. The decline from week 8 to week 12 reflects the fact that 5 of the 7 children in the no-known-cause group and 3 of the 6 children in the probable-cause group resumed chelation treatment. By the end of the 12 weeks of treatment all but 1 of the children showed blood lead levels that were significantly lower than their baseline values. The average decrease in the no-known-cause group was 9.9 μg/100 ml, and in the probable-cause group, 4.5 μg/100 ml. The difference between the 2 was not statistically significant ($t=1.71$, $p<.20$).

By most indications the effects of chelation treatment were different for the 2 groups. Children with no known cause in their history for hyperkinesis seemed

FIGURE 1
Mean Blood Lead Levels for Two Groups of Hyperactive Children over a 12-Week Treatment Period

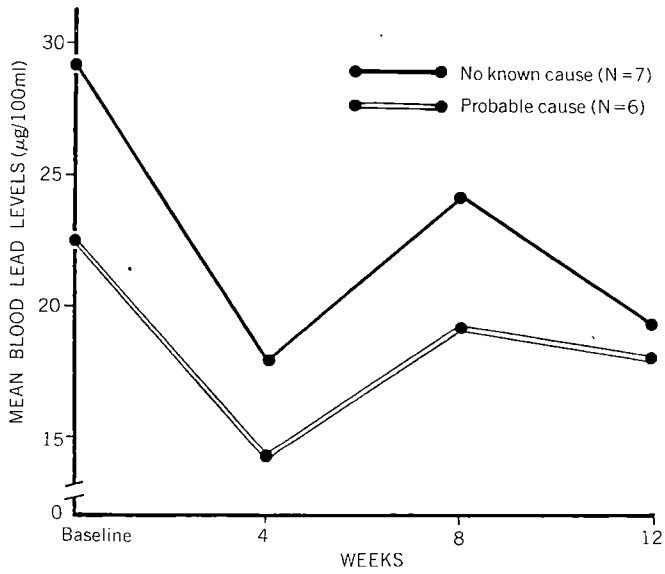


TABLE 1
Effects of Chelation Therapy on Classroom Behavior of 13 Hyperactive Children

Teacher Rating Scale Item	Group	N	Rating: Intake Mean	Rating: Intake SD	Rating: Week 12 Mean	Rating: Week 12 SD	t Value for Changes Within Groups	t Value for Changes Between Groups
Conduct problem	No known cause	7	1.1	0.8	0.8	0.6	2.51*	2.12
	Probable cause	6	1.3	0.7	1.8	0.8	−1.30	
Inattentiveness	No known cause	7	1.1	0.5	0.8	0.5	1.50	1.33
	Probable cause	6	1.6	0.9	1.9	0.9	−0.72	
Fearfulness	No known cause	7	0.6	0.3	0.3	0.2	2.43	1.36
	Probable cause	6	0.9	0.6	0.9	0.7	0.37	
Hyperactivity	No known cause	6	1.9	0.4	1.2	0.5	4.35**	3.35***
	Probable cause	6	2.2	0.6	2.4	0.4	−0.85	
Unsociability	No known cause	7	0.5	0.8	0.3	0.6	1.20	1.01
	Probable cause	6	1.2	0.9	1.4	0.9	−0.62	

* $p<.05$ by t test for dependent means.
** $p<.01$ by t test for dependent means.
*** $p< 01$ by t test for independent means.

TABLE 2
Effects of Chelation Therapy on Parental Ratings of Behavior for 13 Hyperactive Children

Rating Item	Group	N	Rating: Intake Mean	Rating: Intake SD	Rating: Week 12 Mean	Rating: Week 12 SD	t Value for Changes Within Groups	t Value for Changes Between Groups
Hyperactivity checklist	No known cause	7	3.1	0.4	1.4	0.6	8.13*	1.79
	Probable cause	6	3.4	0.6	2.3	0.8	3.49**	
Parent symptom questionnaire								
Conduct problem	No known cause	7	1.1	0.9	0.4	0.5	2.40	2.59***
	Probable cause	5	1.3	0.6	1.5	0.7	−1.58	
Anxiety	No known cause	7	0.5	0.6	0.4	0.6	1.87	0.22
	Probable cause	6	0.7	0.5	0.6	0.5	0.85	
Impulsive-hyperactive	No known cause	7	1.6	0.5	0.5	0.4	5.01*	2.90***
	Probable cause	6	1.8	0.5	1.5	0.6	2.39	
Learning problems	No known cause	7	1.1	0.8	0.6	0.5	2.98**	2.53***
	Probable cause	6	0.9	0.7	1.4	0.9	−1.25	
Psychosomatic concerns	No known cause	7	0.3	0.3	0.1	0.3	2.05	0.80
	Probable cause	6	0.7	0.4	0.7	0.4	0.00	
Perfectionism	No known cause	7	1.0	1.0	0.4	0.7	2.75**	3.12†
	Probable cause	6	0.8	0.7	1.1	0.7	−1.68	
Antisocial behavior	No known cause	7	0.1	0.1	0.0	0.0	1.00	0.39
	Probable cause	6	0.3	0.6	0.3	0.5	1.58	
Muscular tension	No known cause	7	0.4	0.7	0.1	0.3	2.06	0.87
	Probable cause	6	1.0	0.9	1.1	0.7	−0.16	

* $p<.01$ by t test for dependent means.
** $p<.05$ by t test for dependent means.
*** $p<.05$ by t test for independent means.
†$p<.01$ by t test for independent means.

to show considerable improvement, whereas the probable-cause children seemed to profit little. These differential treatment effects were apparent in one or another aspect of the ratings by the teachers, parents, and doctors.

Teacher ratings indicated improvement in hyperactivity and conduct disturbances for the no-known-cause children but little or no change for the probable-cause group (see table 1). Indeed, the week 12 ratings on the hyperactivity factor of the teacher rating scale were below the intake requirement (1.5) for all but 1 child in the no-known-cause group but at or above that level for all children in the probable-cause group.

Ratings by the parents on the parent symptom questionnaire and the hyperactivity checklist gave evidence of widespread improvement in the behavior of the children in the no-known-cause group, which in all but one instance was significantly greater than the changes registered by the parents of the children in the probable-cause group (see table 2). There was a significant reduction in both groups on the hyperactivity checklist. However, the week 12 ratings on this scale

were below our intake requirement (2.0) for all but 1 child in the no-known-cause group but above that level for all but 1 child in the probable-cause group. Thus a trend was also apparent on this rating scale as well.

The doctors' ratings similarly reflected greater improvement in the no-known-cause group. Five of the 7 children in this group were judged to be "much" or "very much" improved, compared with only 1 of the 6 children in the probable-cause group. The doctors' mean ratings of "severity of illness" went from 3.7±0.5 to 1.9±0.4 for the no-known-cause group ($t=7.21$, $p<.01$), while the mean ratings for the probable-cause group began and ended at 3.8 (SD=±0.5 and 1.0).

DISCUSSION

Most authorities agree that hyperactivity is a symptom state resulting from a multiplicity of causes. This study has been directed at examining the possibility that one of them might be a long-standing, mildly increased lead burden in susceptible children. Our findings indicate that with a child whose hyperactive state is not known to be due to any of the common and/or known etiologies, and who also has a slightly increased body lead burden, treating the condition of the increased lead burden with chelating agents markedly ameliorates the hyperactive condition. In other words, when the lead-hyperactivity association is broken by removing the lead, hyperkinesis also seems to diminish. The findings also indicate that when a hyperactive child with a probable cause for his hyperactivity has an elevated lead level, little or no improvement results from chelation treatment. We feel less sure of this latter conclusion because of the sex variability among the probable-cause children and also because of their initially lower baseline blood lead levels.

It will be noted that our results include 1 child in the no-known-cause group and 3 children in the probable-cause group whose scores reflect both chelation and methylphenidate treatment. We would point out that methylphenidate is an effective treatment for hyperactivity, so that if anything, an improvement in the probable-cause group would have been effected to a much larger extent than the no-known-cause group, as more children in that group received both medications. Not using methylphenidate would only have served to widen the behavioral differences between the 2 groups at the end of the chelation period.

Although the use of this criterion is increasingly questioned, 60 μg of lead per 100 ml of blood is usually considered diagnostic of poisoning. In fact, this criterion is quite arbitrary and is based historically on the correlation existing between that lead level and obvious symptoms of poisoning. We have used 25 μg of lead per 100 ml of blood as our primary criterion for treatment. Approximately 50% of the hyperactive children seen have thereby qualified for treatment, and of these more than half showed a marked amelioration in problem behavior over the course of the deleading regimen. Although these findings need more controlled replication, we believe they argue strongly for a significant modification in the lower limits of what is considered lead poisoning. Just as importantly, these findings seriously challenge the threshold concept of lead poisoning.

We conclude this discussion with the observation that there are some children who appear to be unaffected by massive lead levels, i.e., 90–100 μg/100 ml (10). Our work indicates that there are others in whom a relatively small blood lead elevation appears to have a profound effect. It therefore seems obvious that host resistance is a major factor in this complex interplay and should be carefully considered in the promulgation of health regulations.

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Impact of a District Branch Task Force on Women

BY ELAINE HILBERMAN, M.D., MARIA GISPERT, M.D., AND JACKIE HARPER

A questionnaire sent to all women psychiatrists and trainees in North Carolina as part of the development of a district branch Task Force on Women indicated that institutional sexism affects the careers of many of the respondents. Problems of family-professional role conflicts were especially pronounced in residents and faculty women. Survey findings have resulted in recommendations in the areas of education, communication, and increasing women's participation in task force and district branch activities. The authors feel that such task forces provide a much needed network of supportive relationships for women psychiatrists and raise the consciousness of the district branch regarding women's issues.

In 1972 the American Psychiatric Association created a Task Force on Women, which was charged with exploring the concerns of women in psychiatry and the relationship of psychiatry to the problems of women in general (1). These goals were accomplished in several ways, including the establishment of informal communication networks for women psychiatrists at the grassroots level and programs about women at annual meetings of the Association. The strong and visible presence of the APA Task Force on Women provided invaluable support to women psychiatrists around the country, who often had been quite isolated from each other and from their male colleagues. One impact of this support system was the spontaneous appearance of local task forces on women as part of district branch activities. A panel at the 1975 annual meeting (2) described the development of a variety of local task forces on women, which differed as a function of geographic location, constituency, perceived needs, and level of feminist consciousness. Perhaps the one common feature was that the leadership of each task force was always shared by two women, who were able to give each other the necessary support to confront the male-dominated district branches. This report will describe the work and impact of one such local task force in the 2 years since its inception.

The North Carolina Neuropsychiatric Association (NCNPA) is a district branch of the American Psychiatric Association and draws its membership from the entire state. The association has a total membership of about 300, 10% of whom are women. The members are separated by geographic distances as well as a wide spectrum of professional interests. There are semiannual meetings; spring meetings are poorly attended, and fall meetings are moderately well attended by academicians or practitioners, depending on program content. Partly because the leadership of the NCNPA is male and appointments to committees are usually made by personal contacts, the executive and policy making bodies of the association have not included women, and formal programs have reflected traditional interests and values. Several women stated that they had not been asked to participate and hesitated to volunteer because the all-male composition of committees made them feel unwelcome. Further, personal communications to task force members have revealed that women psychiatrists eligible for APA fellowship status have been dissuaded from applying or have been given weak recommendations at the district branch level.

In May 1974, the NCNPA created a Task Force on Women as the result of a direct request made by the two women psychiatrists who subsequently chaired the task force. Once formal task force status was conferred, it was decided that a survey of women psychiatrists in North Carolina should precede both expansion and definition of goals for the task force. The primary purpose of this paper is to present the findings of this survey and their implications.

METHOD

The survey was accomplished by means of a lengthy questionnaire which incorporated material used in a questionnaire developed by the APA Task Force on Women. The questionnaire was mailed to all women psychiatrists and psychiatrists-in-training in the state, regardless of membership status in the NCNPA. One section of the questionnaire dealt with general issues relevant to women and was sent to the entire sample,

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The authors would like to thank the American Psychiatric Association Task Force on Women for permission to use sections of their questionnaire and Anne M. Seiden, M.D., for her assistance in developing the questionnaire used in this study.

while other sections were specifically designed for women in training, private practice, on university faculties, or employed in hospitals or mental health centers.

RESULTS

Of the 50 questionnaires mailed, 25 were completed and returned. A summary of the responses follows.

Demographic Data

The 25 respondents were distributed by professional categories as follows: private practice, N=8; hospitals or mental health centers, N=3; trainees, N=8; and faculty members, N=6. Response rates were 60% for women employed in academia and in hospitals or mental health centers, 50% for private practitioners, and 42% for trainees. The respondents ranged in age from 26 to 77, with a fairly even distribution from the mid-twenties to sixty. Sixty-four percent were married and 36% were single, divorced, or widowed. Respondents had a total of 45 children, with a range of 0–4. Patterns of early childrearing practices of the 17 women with children varied with the age of the respondent. Younger women reported taking less than 6 months off for childbearing and child rearing, while those over the age of 45 had spent an average of 6–8 years away from their careers. Sixty-four percent of the sample had full- or part-time household help.

Seventy-two percent of the sample were working full-time and 28% part-time. Full-time work was defined by the respondents as 36–65 hours a week and part-time work as 10–35 hours a week. Respondents reporting part-time work included all settings other than academia. A broad spectrum of professional interests was reported, with a special interest in children and adolescents mentioned frequently by faculty women and trainees. Few women described any serious research interests. Specialty training was reported by 44% of the sample, but only 25% were Board certified. Failure to take the Boards was usually attributed to insufficient time for preparation as a result of dual commitments to family and career. The respondents tended to be joiners of professional organizations: 76% belonged to the NCNPA/APA, 48% to the American Medical Association, and 36% to the American Medical Women's Association.

Training

The majority of the respondents believed that seminars on women's issues, women's studies, courses, and a format to deal with family-career conflicts are important parts of psychiatric education. Responses indicated that these perceived needs had not been met in respondents' training in the past and continue to be unavailable for the present group of trainees. It is interesting that 60% indicated that they had adequate supervision and teaching by women psychiatrists and 88% believed that there were women available with whom they could share personal concerns about their roles. However, more than half of these affirmative responses were qualified; for example, respondents noted that there was no time set aside in program priorities to deal with role conflict or that only nonphysician women role models were available. Also, one faculty woman was mentioned by several respondents as being the only woman available to trainees.

Patient Care

Questions in the patient-care section dealt with the availability of women therapists, of therapists sensitive to role conflict and to assumptions about mental health based on sex-role stereotypes, of crisis intervention for rape victims, counseling for problem pregnancies, abortion counseling, support for decisions to terminate marriage, and nonjudgmental treatment of lesbians who do not wish to change their sexual preference. The data were strikingly inconsistent—for example, several women who indicated that they were the only women therapists in their geographic areas or academic institutions also believed that availability of women therapists was adequate. Some women did not think it was important for therapists to be sensitive to role conflict. One woman was unaware of the existence of stereotypic assumptions about mental health based on sex role. Almost two-thirds indicated that there had been no discussion in their work settings about issues regarding the treatment of women as patients. The responses suggest that although there is a growing awareness of changes in women's roles in contemporary society, women in psychiatry are not as sensitive as they might be to the needs of women patients.

Women's Movement

Questions in this section were related to impressions of and degree of involvement in the women's movement. Eighty percent expressed favorable feelings about the women's movement. Of this group, however, only 30% described strongly favorable feelings, while 70% indicated milder interest. Uncertainty about the goals of the movement was illustrated by a respondent who was favorable toward it but was "more interested in economic discrimination." One of the less interested respondents commented, "Since I personally never had problems in these areas, it seems that time is better spent in developing one's professional skills." The majority were aware of the concept of consciousness-raising groups, and 24% indicated that they refer patients to such groups. Most favored passage of the Equal Rights Amendment; a few were ambivalent. Although many respondents joined professional organizations, they tended to be nonjoiners of organizations related to the women's movement. The high percentage of positive responses to the women's movement may reflect a skewed sample. We assume that women who took time to complete the questionnaire had more sensitivity to issues of sex role stereotyping and sex discrimination than nonrespondents.

District Branch Activities

Seventy-two percent of the respondents thought that the NCNPA should take a formal, affirmative position with regard to the Equal Rights Amendment, which was at that time being debated in the state legislature. Although most respondents were aware that there have been no women in important policy making or executive positions in the NCNPA, 56% were not interested in increasing their activities in a leadership position, 24% expressed an interest in doing so, and 20% were undecided. Less than half believed that the NCNPA programs adequately reflected concerns of women psychiatrists and problems specific to women patients. They suggested a variety of themes for future programs, including women in residency training, sex roles and children, early training to help women keep options open in future roles, treatment of women patients, lesbianism, and rape. Despite respondents' minimal interest in increasing their participation in district branch activities, over half of them said they would take part in a panel or program about women. The majority thought the existence of a Task Force on Women was relevant and necessary, but only 28% indicated willingness to participate actively.

Individual Work Settings

The following section summarizes responses of women regarding their various professional settings.

1. Private practice. Four of the private practitioners were in individual practice and 4 were in group practice. Their primary activities were individual psychotherapy and consultation. However, all 8 had teaching responsibilities, some of them quite substantial, at nearby teaching institutions. They expressed satisfaction with relationships with male colleagues, whom they described as supportive, and with quality and quantity of patient referrals. Only 3 of these women indicated that they had engaged in any discussions in their work setting about the needs of women patients. Those in group practice had discussed attitudes about working women with their groups before joining. In general, they had fewer complaints and indicated less conflict about roles than did women in the three other settings. Their responses suggested that they had chosen the private practice setting in order to increase flexibility of scheduling and to facilitate family commitments.

2. Hospitals or mental health centers. One of the 3 respondents who worked in this type of setting described overt discrimination in hiring practices, promotions, and salaries and characterized her relationship with male colleagues as "indifferent." The other 2 women described their status as "equal among equals," with no institutional practices discouraging women, but they also reported no provisions other than paid leave based on accumulated leave time to deal with childbearing and child rearing, nor were there special arrangements for night calls, weekends, or vacations for staff members with families. No ombudsperson was available to these women in cases of perceived sex discrimination, and there was no grievance procedure available to 2 of these 3 women. All 3 respondents in this category indicated that there had been no conferences or seminars on the psychology of women, sex roles, etc., at their facilities. While it is not possible to draw conclusions based on a sample of 3 respondents, the lack of flexibility in procedures related to childbearing and child rearing and on-call scheduling indicates subtle institutional sexism of which some women were unaware.

3. Trainees. The 8 trainees described their residency training experiences with frustration and cynicism. They were all in programs with few other women and knew very little about affirmative action programs, recruitment policies, child care arrangements, and grievance procedures in their programs. There were no special arrangements for night call, and part-time training opportunities were difficult to arrange. Provisions for childbirth and child care were generally handled on an individual basis, usually involving paid leave based on accumulated sick or vacation time, with no credit for time in residency. In contrast, in one program there was a formal policy whereby short military leave (e.g., 2 weeks a year in the reserves or the National Guard) was fully paid, did not come out of accumulated leave, and did not lengthen residency training time.

Most of these respondents had no ombudsperson available to deal with any perceived sex discrimination, and 7 of the 8 were not aware of any formal grievance procedure. The one resident who did report the existence of a grievance procedure summarized it as follows: "You end up going to the chairman and if he agrees, you may succeed. If he doesn't, that's it." Financial issues were mentioned often. One woman stated, "Salaries are too low to permit adequate household help to make life bearable while in training." All but one respondent indicated that faculty women were not adequately represented in positions of power at their various institutions.

The information we gained about the content of training was equally disheartening. Most residents reported that less than 10% of their course work, seminars, and supervision was conducted by women, and courses and seminars about women were strikingly absent (e.g., "minimal amount—one seminar during first year of residency"; "adherence to old Freudian psychology—just lip service to treating women as people rather than as castrated men").

Some other comments by women residents included the following:

> I have felt a double standard in my training. If I work extremely hard, I do not have to worry about overt discrimination from the faculty. There is infantilization of women by some and a true lack of understanding by most.
>
> Most [peers] pay little attention to me. They seem to relate to each other as boys only, i.e., sports and poker.
>
> [Relationships with peers] good at present, with some

distance and difficulties around competition . . . many feelings about women in their past placed on me in concentrated form and very unpleasant.

4. Faculty. The 6 faculty respondents were quite similar to the trainees in their expressions of frustration, but they had more specific information available to document seemingly pervasive patterns of discrimination and isolation. Personal contacts—the "buddy system"—seemed to be the prevalent mode of faculty recruitment, with 4 of these 6 women indicating that search committees rarely included women and that open advertising is rare. Only one woman had access to salary information, and there was considerable uncertainty about how these respondents' salaries correlated with those of male peers. One woman reported having been "openly told I would receive less because I was married to another faculty member." Part-time faculty appointments were rare and did not lead to eventual tenure. Provisions for childbearing and child rearing were uncertain, and it is relevant that few faculty women had small children. None of the faculty women indicated the availability of an ombudsperson or of an adequate grievance mechanism for issues of sex discrimination.

Formal discussion about the status of women psychiatrists was reported to be infrequent. In contrast to the women residents' reports of the powerlessness of female faculty members, the women faculty perceived themselves to be adequately represented in positions of power. Course work and seminars specifically on women's issues were absent; such material was only brought up indirectly in an occasional seminar.

Faculty women made the following comments about problems in their departments: "Integration of professional life with family and/or private life has presented problems for almost every woman in differing degrees." "Lack of power, isolation of women from male faculty, and rigid expectations that a successful woman must act like a man to survive in the department." "Not enough time; academic pressure towards productivity and performance. Women who are offered positions only stay from one to four years because of the stress of the academic environment."

TASK FORCE RECOMMENDATIONS

A summary of questionnaire results was presented to the membership at the fall meeting of the NCNPA in October 1974, and the following formal recommendations were offered:

1. Despite the burdens of dual roles, women must become active on their own behalf, as advocates for women patients, and as role models for men and women trainees.

2. The NCNPA has a responsibility to become sensitized to the needs of women members in the areas of both educational programs and appointments. A generous portion of the 1975 fall meeting might appropriately be devoted to a theme of particular relevance to women in psychiatry.

The report and recommendations were surprisingly well received, partially because this is an area of growing interest. In addition, the organization was facing an energy crisis in which apathy and insufficient commitment to maintain the organization prevailed. The Task Force on Women was proposed and perceived as one mechanism for bringing a new level of interest, activity, and membership to the entire organization. The final report of the American Psychiatric Association Task Force on Women recommending a standing committee on women was also introduced and added credibility to the local task force report. As part of the fall meeting, the NCNPA task force held an open meeting for women members, at which time our membership was expanded.

IMPLEMENTATION AND IMPACT

The following section summarizes the work of the Task Force on Women to implement their recommendations.

1. *Participation.* A mailing was sent to all women members, asking about their interest and availability in serving on the various committees and components of the NCNPA, and the responses were forwarded to the district branch President. Questionnaire responses had indicated that few women would accept an appointment, so it was particularly gratifying that almost half of the female membership agreed to serve on committees. We believe that the questionnaire itself may have served an important consciousness-raising function. One of the cochairpersons of the task force was elected to the Executive Council of the district branch and was the first woman to serve on that council in many years. Women have subsequently been elected to several other positions on the Executive Council and are now represented on almost all committees of the NCNPA.

2. *Communication.* Because the district branch encompasses the entire state, meetings have not seemed a workable vehicle for communication, and the NCNPA newsletter has been used to disseminate information about women to the membership. There was, for example, an entire page on the Equal Rights Amendment, including a statement of APA's position, which led many members to contact their legislators.

3. *Support.* Although few of the women psychiatrists have expressed interest in an ongoing consciousness-raising group, task force meetings always seem to go far beyond the stated agenda; personal and professional conflicts are often presented with urgency and a flood of relief. This phenomenon documents the extent to which these women have been isolated from their peers and their need for support from women colleagues. For example, several articulate and talented women who were invited to participate in the NCNPA fall meeting refused because they felt they had little of

value to communicate to their colleagues. It is anticipated that continuing contacts among North Carolina's women psychiatrists will raise self-esteem as well as consciousness.

4. *Education.* The idea that a program about women was relevant and appropriate was accepted, and such a program took place at the 1975 fall meeting of the NCNPA. Fifteen enthusiastic women participated in a series of brainstorming meetings which resulted in more than enough material for a one-week program. The one-day program was entitled "Changing Images of Women" and focused on the concerns of professional women and the mental health needs of women patients. Issues about men's roles and the impact on men of the changing roles of women were also addressed. Although there is recognition that women psychiatrists have dual roles as professionals and wives and/or mothers, there has not yet been a full awareness of men psychiatrists' dual roles as professionals and husbands and/or fathers. Personal communications with male colleagues confirm that men also experience difficulty with time demands and role conflict.

The effectiveness of the task force was documented by the responsiveness of the NCNPA membership to the 1975 annual program. Full committee status was granted, with expansion of the Committee on Women to 15 members, including representation by spouses. The one-day program included formal presentations by women psychiatrists about supportive services for women medical students (3), women as residents in psychiatry (4, 5), psychotherapists' biases toward women (6) and research considerations by and about women (7). The evening presentation by a male historian (8) utilized a multimedia approach to describe the history and implications of the male sex-role stereotype and to evoke an affective response. The impact of the program was quite dramatic; both men and women psychiatrists and their spouses reconsidered their own roles as family members, parents, and professionals with thoughtfulness and poignancy.

In retrospect, we have theorized that the combination of cognitive input about women and the very evident cohesiveness and camaraderie shared by the women probably resulted in anxiety and a sense of isolation among the men, and the presentation about men gave them a voice with which to speak eloquently for themselves. Expressions of sadness and grief were universal as they talked about the pressures to be successful and the resulting estrangements from their families, especially their children. The meeting ended on a hopeful note, with considerable expressions of relief that there is more than one way to be a man or woman.

DISCUSSION

It is our impression that institutional sexism exists and directly affects the lives and careers of women psychiatrists in North Carolina, with the possible exception of those who choose private practice. Even in that setting, there are some women who would have preferred a major teaching role but found it to be incompatible with other responsibilities. Some women were aware of the institutional obstacles; others were not. Thus some respondents expressed satisfaction with their work settings while describing barriers to the full participation of women professionals. Women with young children seemed particularly sensitive to these deterrents, probably because younger respondents are more aware of social change and also face the realities of dual roles. One practitioner remarked,

> Those I know with no children express satisfaction and declare an absence of problems. Younger women have expressed stress problems pertaining either to husbands or children relative to the quantity of time together and deep concerns about failures of backup help with children.

Very few of the significant changes in the role and status of women throughout our society are reflected in current psychiatric education and training. Traditional values prevail, and there is little opportunity to discuss contemporary theories about the psychology of women, more appropriate treatment modalities for women patients, research efforts, and the role conflicts of women professionals. Role models for trainees continue to be unavailable because there are so few women in academic careers. Indeed, women in academia, both as faculty members and trainees, seem to be the most troubled about their careers and their families. As long as academic and professional requirements are presented in terms of male norms (e.g., the women respondents described part-time employment as 35 hours a week and full-time as 65 hours), women professionals will not be available as teachers, leaders, and role models.

Very few of the women who were sensitive to the issues we have discussed were participating in activities related to women, either in a professional role or as members of their communities, and few were actively involved with the district branch. The responses to a question about what these professional women believed were their most important sources of personal gratification are relevant to their tendency to be nonjoiners and nonactivists regarding women's issues: career and family were considered equally important, with over half of the respondents indicating (in this work-related questionnaire) that family came first. The tendency of the respondents to be nonparticipants may be in part a reflection of lack of awareness of the issues, but the reality is that time is at a premium, with career and family responsibilities leaving little energy for other activities.

CONCLUSIONS

The experience of the questionnaire and the existence of a visible and vocal group of women has served to raise consciousness among NCNPA membership

that women's issues, whether they relate to the role and status of women professionals, the treatment of women patients, or legislation determining social policy, are the legitimate and rightful concern of psychiatrists. We would like to reemphasize the fact that our local Task Force on Women would not have been possible without the strong leadership, encouragement, and support of the APA Task Force on Women.

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Diazepam Treatment of Socially Isolated Monkeys

BY ADELE B. NOBLE, M.D., WILLIAM T. MCKINNEY, JR., M.D., CAROLE MOHR, AND ELAINE MORAN

Four rhesus monkeys were reared for the first eight months of life in total social isolation. One animal died during this period; the three remaining subjects were treated with diazepam in an isolation chamber, in their home cages, and in a playroom testing situation. Diazepam significantly decreased the self-disturbance behaviors of two subjects, and there was even the appearance of some social behaviors, although they were limited and not of the same quality as in nonisolated subjects. The authors discuss the implications of the data for understanding the significance of the social isolation syndrome in monkeys as a model for human psychoses.

SINCE THE EARLY 1960s it has been known that rhesus macaques that have been totally socially isolated for the first 6 months or more of their lives exhibit pervasive and persistent behavioral abnormalities (1). These behaviors include self-directed responses such as self-clasping, rocking, huddling, self-mouthing, and self-aggression. Age-appropriate social and environmental responses, such as social exploration and play, occur very infrequently in isolates. Until 1970 these abnormalities were viewed as permanent since rehabilitative attempts such as social exposure to peers (1), gradual adaptation to the environment (2), and aversive conditioning (3) were unsuccessful.

In 1970 Harlow and Suomi (4) achieved partial rehabilitation of 6-month total isolates by exposing them to heated, cloth-covered surrogates and then housing the animals in pairs. The rehabilitation was partial in that there were significant decreases in abnormal behaviors but only limited development of patterns of social interaction. However, this study did indicate that some rehabilitation was possible.

Two years later Suomi and associates (5) reported their most successful attempt at total rehabilitation. They employed younger monkeys as social "therapists" for the 6-month total isolates, and the isolates showed virtually complete recovery. Their self-directed behaviors decreased to insignificant levels, and their social interactions made them indistinguishable from their therapists.

Novak and Harlow (6) repeated the study with 12-month total isolates. Using environmental adaptation, self-pacing of visual input, and younger stimulus monkeys, they again achieved total rehabilitation. They concluded that all three modes were necessary to totally rehabilitate isolate monkeys. They said that "development of social behaviors in isolate-reared monkeys depends upon techniques that reduce anxiety in the new situation, that subsequently reduce interfering behaviors, and that promote the desired positive behaviors" (6, p. 461).

Exploring the possibility that drug treatment alone, without social stimulation, might effect change, McKinney and associates (7) used chlorpromazine to treat four 2½-year-old rhesus macaques that had been reared for the first 12 months of life in partial social isolation. These animals had high levels of self-disturbance behaviors, which had persisted since their removal from isolation. While these behaviors decreased significantly in 3 subjects, recovery was only partial since, as was the case with the surrogate-rehabilitated animals, the appearance of complex social behaviors was very limited. While this study generated much interest in the possibility of drug treatment of the isolation syndrome, it raised several questions.

1. Would rehabilitation attempts with drugs be more successful if they were initiated earlier, i.e., at or prior to termination of the period of isolation, rather than after the abnormal behaviors were well established?

2. Would the response to chlorpromazine be duplicated by the use of antianxiety drugs that did not have antipsychotic properties? Novak and Harlow's conclusion (6) that reduction of anxiety is essential in the treatment of social isolates supports the hypothesis that any agent which reduces anxiety would effect some degree of rehabilitation.

Revised version of a paper presented at the 128th annual meeting of the American Psychiatric Association, Anaheim, Calif., May 5–9, 1975.

At the time this work was done the authors were with the University of Wisconsin, Madison, Wis. 53706, where Dr. Noble was Child Psychiatry Fellow and Dr. McKinney is Professor and Chairman, Department of Psychiatry, and Director, Wisconsin Psychiatric Research Institute of the Medical School. Ms. Mohr is Laboratory Technician, and Ms. Moran is Research Specialist, Primate Laboratory, Department of Psychology. Address reprint requests to Dr. McKinney.

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3. Would response to the drug maintain itself through a challenge with socially adequate peers?

In this paper we report the results of the first part of a two-part study designed to address these questions. This study, which addressed questions 1 and 2, was designed to determine whether diazepam treatment of monkeys, at the termination of 6 months of total social isolation, would substantially reverse the negative behavioral effects of isolation. The long-term results of treatment and whether they are maintained through social challenge will be reported in the future.

METHOD

Subjects

Four rhesus macaque monkeys (2 males and 2 females), laboratory born and separated from their mothers at birth, were reared for the first 15 days of their lives in the laboratory nursery using the procedure described by Blomquist and Harlow (8). Each subject was then placed in an individual isolation chamber, as described by Rowland (2), where it remained for 8 months, unable to see or contact any social agent. One female animal died as the result of an overwhelming enteritis that she contracted during the fifth month of isolation.

Procedure

After 7 months of isolation, and while the monkeys were housed in their isolation chambers, drug administration was begun. Each subject was briefly removed from its isolation chamber twice daily at 8 a.m. and 4 p.m. to receive 2 mg/kg of diazepam in suspension by nasogastric entubation. This continued for 4 weeks, at which time each subject was permanently removed from its isolation chamber and placed in a bare 1.90-cm wire mesh cage measuring 76.25×61×76.25 cm (hereafter called the "home cage"), where it could see and hear but not contact the other monkeys. Drug administration continued as described throughout the remainder of the experiment. Four weeks after termination of isolation the subjects were introduced as a group of three to a playroom for twice-daily, 30-minute testing sessions held 4 days a week.

Data Collection

After 6 months of isolation each subject was observed for two 10-minute periods daily (at 10 a.m. and 3 p.m.). Thus there was 1 month of formal observation prior to treatment. Observation continued on this schedule for the remainder of the experiment. The first 2 months of observation were through a one-way mirror in the isolation chamber; the third month was in the home cage; and the fourth through ninth months of observation were through a slanted plastic window in the playroom. The times of the observation were scheduled to follow the morning drug administration by 2 hours and to precede the afternoon drug administration by 1 hour.

During each observation period the behavior of the subjects was scored using each of the 31 behavioral categories defined in appendix 1. Category scores were recorded as modified frequencies, i.e., the number of 15-second intervals in which the behavior occurred during the 10-minute rating period for each animal in each session. Two experienced testers with high interrater reliability recorded the subjects' behavior. Ordering of testing among the subjects was randomly determined.

Data Analysis

For purposes of data analysis the individual behaviors were combined into 7 groupings (see Appendix 1), and combined modified frequencies were calculated for each grouping for each of the following time periods: baseline chamber; drug chamber; drug home cage; drug playroom 1, 2, 3, and 4; and postdrug playroom 1 and 2. Each period represented a time block of 4 weeks.

A Mann-Whitney U test was employed to compare scores from the following time blocks: baseline chamber versus drug chamber; drug chamber versus drug home cage; drug playroom 1 versus drug playroom 2, 3, and 4; and drug playroom 4 versus postdrug playroom 1 and 2. Scores from the morning and afternoon sessions were analyzed separately.

RESULTS

Data analysis yielded the following general findings:

1. Six-month total social isolates can be partially rehabilitated with diazepam.
2. Not all subjects respond.
3. Discontinuation of diazepam results in relapse.

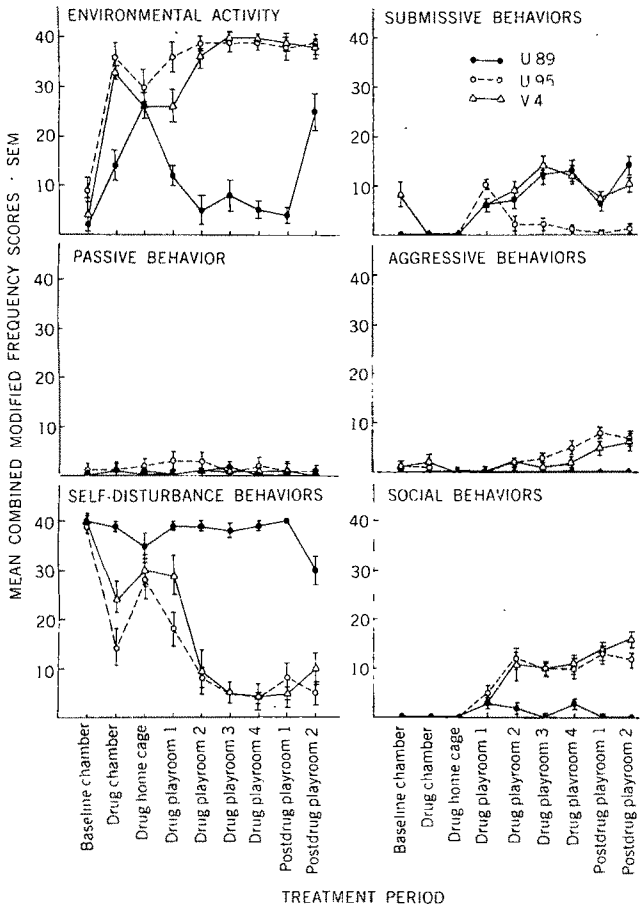
Figure 1 presents the mean combined modified frequency scores (±SEM) for 6 of the collapsed categories for each treatment period. (The data reflect the combined scores of both rates.) Table 1 gives the values obtained in the statistical analysis of the data. The miscellaneous category, which consisted of behaviors that did not clearly fit into any of the other categories, yielded no useful data on analysis and therefore is not included in the discussion that follows.

Response in Isolation Chamber

During this period all 3 animals responded to diazepam with a decrease in self-disturbance behaviors. With 2 of the animals (U 95 and V 4), the response was highly significant in both the morning and afternoon test sessions. The self-disturbance behaviors of the third monkey (U 89) decreased less dramatically, and the decrease was significant only in the afternoon session. All animals demonstrated a highly significant increase in environmental exploration in both test sessions.

Animal V 4 had the highest scores on submissive behaviors during the baseline isolation chamber period, and these declined significantly with diazepam treat-

FIGURE 1
Mean Combined Modified Frequency Scores for Six Categories of Behavior Exhibited by Three Monkeys Treated with Diazepam



ment. This animal also had a slight but significant increase in scores on passive behavior. Although both morning and afternoon scores changed significantly, there was no statistical significance between the two times of day. Because the increase in V 4's passive behavior was not marked and at the same time the increase in environmental behaviors was so dramatic, it seems unlikely that the change in passivity reflected sedation by diazepam.

These data clearly indicate that the behavioral repertoire of isolate-reared monkeys can be significantly altered even within isolation by diazepam treatment.

Response in Home Cage

An interesting difference in the pattern of response of the 3 animals began to manifest itself as they were removed from their isolation chambers and placed in their home cages. The 2 animals with the greatest decrease in self-disturbance behaviors within the chamber (U 95 and V 4) then reversed their responses. They both evidenced a significant increase in self-disturbance behaviors, and U 95 also had a significant decrease in environmental exploration. The remaining animal, U 89, who had shown less of a decline in self-disturbance behaviors in isolation, had a further reduction in these behaviors in the home cage and, at the same time, significantly increased its environmental exploration. These changes, which remained consistent through morning and afternoon observations, demonstrated early differences in response patterns to treatment.

Response in Playroom

There was no appropriate baseline with which to compare the first period of playroom behavior. To use home cage observations as this baseline would have been unfair, since social behaviors that naturally competed with disturbance behaviors could only be scored during playroom observation, and this might have falsely exaggerated a decline in disturbance behavior. Comparisons were therefore made between each subsequent playroom period and the first playroom period. However, there is a large body of literature to document the devastating effects of 6 months of total social isolation on the playroom behavior of rhesus monkeys (e.g., references 2, 3, 9).

The previously noted differences in patterns of response became even more marked as the experiment progressed. U 95 and V 4, whose improvement was greater in the isolation chamber and who showed some reversal in the home cage, demonstrated a highly significant therapeutic response with continuing playroom experience. There was a significant reduction in self-disturbance behaviors in 2 of the animals. Environmental exploration increased to a maximum in a mirror image of the decline in disturbance behaviors, and social responses appeared. With one exception these changes were consistent through morning and afternoon test sessions; that is, the differences in U 95's afternoon environmental explorations in playroom 3 versus playroom 1 were not significant.

The third animal, U 89, whose maximum therapeutic response was in the home cage, completely reversed all positive changes when he was confronted with social experiences. His disturbance behaviors were at a maximum throughout playroom testing, his environmental exploration decreased to very low levels, and there was no appearance of social responses. These observations were consistent through morning and afternoon testing.

Analysis of the change in passive behavior through the playroom periods 1 through 4 showed low levels with no consistent trends in any of the animals. Analysis of the submissive scores revealed the pattern of dominance that emerged among the monkeys.

Isolation animals classically reveal little or no socially appropriate aggressive behaviors. It is interesting to note that the 2 animals who showed positive response to the drug in other categories also had a significant increase in aggressive behaviors, although this increase in V 4 was noted only in the morning test sessions. However, this increase was almost entirely comprised of threats and barks, i.e., facial and vocal expressions, rather than acts of aggression.

TABLE 1
Results of Statistical Analysis of Behavioral Rating Scores for Three Socially Isolated Monkeys*

Periods Compared	Self-Disturbance Behaviors		Passive Behavior		Environmental Activity		Submissive Behaviors		Aggressive Behaviors		Social Behaviors	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
Baseline chamber versus drug chamber												
U 89	n.s.	p<.05	n.s.	n.s.	p<.005	p<.005	n.s.	n.s.	n.s.	n.s.	—	—
U 95	p<.005	p<.005	n.s.	n.s.	p<.005	p<.005	n.s.	n.s.	n.s.	n.s.	—	—
V 4	p<.005	p<.005	p<.005	p<.05	p<.005	p<.005	p<.005	p<.005	n.s.	n.s.	—	—
Drug chamber versus drug home cage												
U 89	p<.05	p<.05	n.s.	n.s.	p<.05	p<.005	n.s.	n.s.	n.s.	n.s.	—	—
U 95	p<.005	p<.01	n.s.	n.s.	p<.005	p<.01	n.s.	n.s.	n.s.	n.s.	—	—
V 4	p<.05	p<.005	p<.005	p<.005	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	—	—
Drug playroom 1 versus drug playroom 2												
U 89	n.s.	n.s.	n.s.	n.s.	p<.005	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
U 95	p<.01	p<.005	n.s.	n.s.	p<.005	p<.05	p<.005	p<.05	p<.005	p<.005	p<.05	p<.005
V 4	p<.005	p<.005	n.s.	n.s.	p<.01	p<.005	p<.05	p<.01	p<.05	n.s.	p<.005	p<.005
Drug playroom 1 versus drug playroom 3												
U 89	n.s.	n.s.	n.s.	n.s.	p<.05	p<.005	p<.01	n.s.	n.s.	n.s.	n.s.	n.s.
U 95	p<.005	p<.05	n.s.	p<.05	p<.05	n.s.	p<.005	p<.005	p<.005	p<.005	p<.05	p<.01
V 4	p<.005	p<.005	p<.01	n.s.	p<.005	p<.005	p<.005	p<.005	p<.05	n.s.	p<.005	p<.005
Drug playroom 1 versus drug playroom 4												
U 89	n.s.	n.s.	n.s.	n.s.	p<.005	p<.005	p<.01	p<.05	n.s.	n.s.	n.s.	n.s.
U 95	p<.005	p<.005	n.s.	p<.05	p<.05	p<.05	p<.005	p<.005	p<.005	p<.01	p<.05	p<.01
V 4	p<.005	p<.005	p<.005	p<.01	p<.005	p<.005	p<.005	p<.005	p<.005	n.s.	p<.005	p<.005
Drug playroom 4 versus postdrug playroom 1												
U 89	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	p<.01	n.s.	n.s.	n.s.	p<.005	n.s.
U 95	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	p<.05	p<.01	p<.05	n.s.
V 4	n.s.	n.s.	n.s.	n.s.	p<.05	p<.05	p<.005	p<.05	p<.01	n.s.	n.s.	n.s.
Drug playroom 4 versus postdrug playroom 2												
U 89	p<.01	p<.005	n.s.	p<.05	p<.005	p<.005	n.s.	p<.005	n.s.	n.s.	p<.005	p<.05
U 95	p<.05	n.s.	n.s.	n.s.	p<.05	n.s.	n.s.	n.s.	p<.01	p<.05	p<.05	n.s.
V 4	p<.05	p<.01	n.s.	n.s.	p<.01	n.s.	n.s.	n.s.	p<.005	n.s.	p<.05	n.s.

*By Mann-Whitney U test.

These data are important in that they clearly demonstrate a therapeutic response to diazepam that included the appearance of social and aggressive behaviors without social models. However, it should be noted that not all monkeys respond and, in those which do, the social and aggressive behaviors are not at the response level of normal monkeys either in quality or quantity.

Response in Postdrug Playroom

Although there were some trends indicating reversal of improvement in U 95 and V 4 during the first 4-week period off diazepam, complete reversal was delayed until weeks 4 through 8.

Some interesting phenomena were noted with nonresponder U 89. After 4 weeks off diazepam, his environmental activity increased significantly, his disturbance behaviors decreased slightly but significantly, the minimal social response disappeared, and submissive responses decreased significantly in the afternoon session.

DISCUSSION

The results of this experiment indicate that the antianxiety agent diazepam will reduce the negative behavioral effects of 6 months of isolation in rhesus monkeys. As in human clinical research, the availability of subjects in primate research is often not ideal, and this

study was limited by the small number of experimental subjects and the unavailability of concurrent control subjects.

Although there were no concurrent controls, there are data available about the fate of 6-month isolates (2, 3, 9). These data indicate that historically there was no spontaneous reversal of disturbance activity or appearance of environmental exploration or social interaction for 4 to 6 months following isolation. When changes did appear, they were not at the level of the changes noted much earlier in this paper. It therefore seems unlikely that the recovery we noted would have been spontaneous. Still, this pilot study should be replicated with a larger number of experimental subjects and with placebo control subjects.

Comparison of the degree of rehabilitation achieved with diazepam versus chlorpromazine (7) shows that earlier treatment with diazepam provides greater rehabilitation. Both drugs will reduce disturbed behaviors, but treatment with diazepam results in higher, more consistent increases in environmental exploration and social and aggressive behaviors. This comparison is limited by the degree to which the populations studied in each experiment differ, i.e., in rearing experience, age of subjects at outset of treatment, and sexual distribution of the animals. Whether the improvement we noted was due to the treatment agent alone must be determined in future studies.

Despite the limitations of this study, it is now clear that chlorpromazine is not the only agent that can effect therapeutic change in isolate monkeys and hence makes it more likely that chlorpromazine's effectiveness is due to its nonspecific rather than its antipsychotic properties. These data argue against the isolation syndrome in monkeys as a model for human psychoses and illustrate the importance of not prematurely attaching clinical labels to the abnormal behavior of animals until comprehensive rehabilitation and mechanism studies are completed. Apparent behavioral similarities will not suffice. Of course, we cannot completely rule out the isolation syndrome as being "psychotic-like." It is theoretically possible that monkeys which are more severely affected by the isolation are "psychotic" and, while unresponsive to antianxiety agents, are responsive to antipsychotic drugs. Further work will be necessary to determine whether this possibility has merit.

The reasons for the monkeys' differential response to diazepam are unclear. Based on the nonresponder's initial improvement in the chamber and in the home cage, we explored the hypothesis that he would respond with higher doses of diazepam. Drug dosage in this subject was gradually increased over a period of 2 months to 9 mg/kg. No side effects were noted, and dosage remained at that level for another month. No further improvement was observed.[1]

The differential response of isolates to rehabilitative attempts has been noted in other studies. In a study by McKinney and associates (7), chlorpromazine was effective in decreasing self-disturbance behaviors in 3 of 4 monkeys. Harlow and Harlow's report (1) of the first 2 animals isolated for 6 months described them after 8 months of postisolation exposure to peers. "One must be characterized as extremely disturbed and almost devoid of social behavior. The other resembles a normal two month old rhesus infant in its play and social behavior, and the indications are that it will never be able to make mature contact with its peers."

Other experimenters who have noted this difference have found it to be sex related. Clark (9) and Mitchell (10) found that males were more difficult to rehabilitate than females. They also noted that males were more severely affected by the early isolation.

The nonresponder in our study was male. Other observations about him support the idea that he was more severely affected by the isolation than were the other 2 animals. Unlike the others, his disturbance behaviors included head banging, convulsive jerks, and spasms. In addition, he was unable to make the transition from a liquid diet to solids until several months after the others, and he seemed more susceptible to injury and illness. While it seems that he was more severely affected and more difficult to rehabilitate, 1 of the responders was male and his improvement paralleled that of the female's. These observations point to the need for future isolation studies to include greater numbers of animals, equal distribution of sexes, and attention to differential symptoms produced by isolation, as well as analysis of differential responsiveness to attempts at rehabilitation.

[1]The data are available from Dr. McKinney on request.

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APPENDIX 1
Classification and Definitions of Behavioral Categories

ENVIRONMENTAL ACTIVITY

Environmental exploration: any tactile or oral exploration of the physical surroundings.

Locomotion: ambulation of one or more full steps.

Self-play: active behavior in which the subject shows no orientation to other animals; involves one or more of running, vigorous bounding, and rebounding off enclosure in a fairly continuous fashion.

PASSIVE BEHAVIORS

Passivity: maintenance of a static position for a minimum of three seconds with no simultaneous behavior.

SELF-DISTURBANCE BEHAVIORS

Huddle: self-enclosed, fetal-like position incorporating any or all patterns of self-clasp, self-embrace, or lowered head.

Rock: repetitive, nonlocomotive forward-and-backward movement.

Self-bite: specific, vigorous self-directed bite.

Self-clasp: firm manual or pedal clutching of self, excluding the genital area.

Self-mouth: oral contact with any part of the body exclusive of the genital area, excluding biting.

Stereotypy: identical movements maintained in a rhythmic and repetitive fashion for at least three cycles (scored independently and excluding locomotion).

SUBMISSIVE BEHAVIORS

Escape: direct oriented running from another animal differentiated from "yield" in that the subject is intensely fleeing to avoid any possible interaction.

Fear grimace: facial expression resembling a smile that is produced by pulling the lips back and exposing the teeth.

Screech: high-intensity vocalization resembling a scream.

Yield: oriented movement or withdrawal by an animal submitting or ceding area to another animal.

AGGRESSIVE BEHAVIORS

Aggression: vigorous and/or prolonged biting, hair-pulling, and clasping accompanied by one or more of threat, barking, piloerection, or strutting.

Attack: noncontact approach or chase accompanied by threats, barking or other indications of hostility.

Bark: low-pitched, staccato-like vocalization that resembles coughs or yips.

Threat: facial expression produced by pulling the ears back and pulling the lower jaw down and out.

SOCIAL BEHAVIORS

Play: oriented rough-and-tumble activity with or without locomotion and/or mutual and nonmutual chase.

Present: tail raised with erect and rigid stance of hind quarters oriented to another animal.

Proximity: maintenance of a distance of three inches or less from another animal for at least three seconds.

Social exploration (active or passive): oral or manual examination of another animal (scored whether the initiator or recipient of such behavior).

Social groom (active or passive): discrete picking or spreading of the fur of an animal (scored for both animals involved).

Social sex: all sexual mounting and thrusting behavior, whether appropriate or inappropriate.

MISCELLANEOUS BEHAVIORS

Contact cling: maintenance of gross body contact with one or more animals.

Convulsive jerk: any spasmatic rigid movement of the body; involuntary jerking of the body.

Coo: drawn-out dove-like cry in a variety of pitches.

Miscellaneous vocalizations

Nonsocial sex: Oral or manual self-manipulation of the genital area.

Self-groom: Discrete self-directed picking and/or spreading of the fur.

Spasm: Single or repetitive sudden convulsive jerk involving a major part of the body.

Importance of Dopamine Metabolism for Clinical Effects and Side Effects of Neuroleptics

BY HERMAN M. VAN PRAAG, M.D., PH.D., AND JAKOB KORF, PH.D.

The authors studied the relation between human central dopamine (DA) metabolism and the clinical effects of neuroleptics. The neuroleptic-induced increase in central DA turnover (an indicator of the degree of DA receptor blocking) was found to be positively correlated with the therapeutic effect of neuroleptics and the development of hypokinetic-rigid symptoms. This supplies a direct argument in support of the contention that DA antagonism is related to the occurrence of clinical effects. The authors also found indications that neuroleptics of different chemical types do not significantly differ in their intrinsic ability to provoke hypokinetic-rigid symptoms, that development of these symptoms depends on the patient's individual susceptibility, and that individual susceptibility is based on relatively low DA turnover.

NEUROLEPTICS of the group of phenothiazines, butyrophenones, and diphenylbutylpiperidines enhance intracerebral dopamine (DA) turnover in test animals (1–3). One hypothesis relates this phenomenon to the blocking of postsynaptic DA receptors by neuroleptics and regards it as a compensatory phenomenon aimed at breaking the block (4–6). It has also been hypothesized that the antipsychotic action of neuroleptics largely depends on receptor blocking in the mesolimbic and mesocortical DA system but that the occurrence of hypokinetic-rigid symptoms depends more on receptor blocking in the nigrostriatal DA system (7–9). This hypothesis is based on two arguments: 1) neuroleptics regarded as extrapyramidally very active in human individuals are believed to cause a more marked increase in nigrostriatal DA turnover than neuroleptics that produce fewer motor side effects; 2) anticholinergic antiparkinson drugs antagonize the extrapyramidal side effects of neuroleptics without affecting their antipsychotic effect. According to Andén and associates (7–9), on the biochemical level anticholinergic antiparkinson drugs reduce the neuroleptic-induced increase in turnover in the nigrostriatal DA system but exert less influence on the increase in turnover in the mesolimbic and mesocortical DA system.

In earlier studies we found suggestive evidence that neuroleptics of the phenothiazine and butyrophenone type produce a dose-dependent increase in central DA turnover in human subjects as well as in animals (10); that the dopaminergic system in psychotic patients can be hyperactive, but this phenomenon is related to motor hyperactivity rather than to the presence of such "genuine" psychotic symptoms as delusions and hallucinations (10); and that the differential influence of neuroleptics on the two DA systems could not be confirmed in rats (11). The DA turnover in the caudate nucleus on the one hand and in the nucleus accumbens and olfactory tubercle on the other showed a virtually parallel (i.e., identical percent) increase in response to a series of disparate neuroleptics.

Furthermore, we found that neuroleptics described by clinicians as causing little extrapyramidal activity do not exert a significantly less marked influence on

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The papers in this section are grouped around a specific topic. Publication here does not, however, imply that the Editor considers this material to constitute a comprehensive analysis of the topic.

striatal homovanillic acid (HVA) than neuroleptics described as frequently provoking extrapyramidal symptoms (11). Wiesel and Sedvall (12) reported similar findings. These data would seem to point to two possible conclusions. 1) Neuroleptic-induced extrapyramidal symptoms and increased DA turnover in the nigrostriatal system (results of receptor blocking) are not correlated in man. This is improbable in view of, for example, what we know of the pathogenesis of Parkinson's disease. 2) The various neuroleptics do not differ substantially in their intrinsic ability to provoke extrapyramidal symptoms in human individuals. This would be at variance with the clinical view that they do.

Investigations into the correlation between neuroleptic activity and DA metabolism were continued in our present study with reference to the following questions:

1. Is there a correlation between the therapeutic and extrapyramidal effects of neuroleptics and their stimulant effect on central DA turnover (viewed as a yardstick of the severity of the transmission inhibition provoked in the dopaminergic system)?
2. Do neuroleptics differ in their ability to provoke extrapyramidal symptoms, more specifically, hypokinetic-rigid symptoms? If, contrary to the clinical view, this would not be demonstrable, this would mean that the occurrence of these symptoms at a given neuroleptic dosage is determined less by the type of neuroleptic used than by the patient's individual sensitivity. In that case the following question arises:
3. Is DA turnover an important factor with regard to this individual sensitivity in that low pretherapeutic DA turnover predisposes an individual to hypokinetic-rigid symptoms?

DA turnover was evaluated on the basis of the probenecid-induced increase in HVA concentration in the lumbar cerebrospinal fluid (CSF); the rationale for this method has been described elsewhere (13–16).

Informed consent was obtained for all human subjects studied.

METHOD

Study 1

Thirty-two patients with acute psychoses admitted to the research unit of our department of biological psychiatry were treated with chlorpromazine (Largactil, N=12), haloperidol (Serenase, N=10), or perphenazine (Trilafon, N=10). At admission all psychotropic medication was discontinued. Neuroleptic medication was started at least 5 and at most 10 days after admission unless the psychosis had faded without medication (this has happened from time to time). In 10 cases agitation made it impossible to refrain from giving medication until neuroleptic medication was started. These 10 patients were sedated in the interim period with a standard powder containing 100 mg of amobarbital (Amytal), 100 mg of bromisovalum (Bromural), and 100 mg of methylphenobarbital (Prominal). At the most, this medication was given 3–4 times daily.

Unless there was severe agitation, the patients were randomly placed in either the chlorpromazine or the perphenazine group 5–10 days after admission. The dosage was kept flexible as follows:

Each patient received 1 capsule 3 times daily. The capsule might contain placebo; 50, 100, 150, or 200 mg of chlorpromazine; or 2, 4, or 8 mg of perphenazine. The patient could thus receive 0–600 mg of chlorpromazine or 0–24 mg of perphenazine daily. The capsules were identical. To ensure optimal therapeutic effect, the dosage was determined daily by a psychiatrist who was not one of the raters. Every day a research assistant supplied the head nurse of the research unit with the capsules, specifying which patient was to receive which capsules.

In the case of severe motor unrest the patient was treated with 6–15 mg of haloperidol; in 5 cases this agent was given intramuscularly during the first 1–3 days of drug administration because oral medication was refused. The haloperidol dosage considered necessary was also determined daily.

The test patients remained in the research program for at least 1 week and at most 3 weeks. The experimental period was 1 week for those who responded inadequately to the medication given and for whom longer postponement of appropriate medication was not considered justifiable.

The patient's mental condition was scored twice weekly on a 10-item, 5-point rating scale by the research nurse and the attending physician, working independently. The highest score on this scale was 40 (maximal pathology), and the lowest was 0. The occurrence of any hypokinetic-rigid and dyskinetic symptoms was assessed twice weekly by the attending physician, who used a 4-point rating scale.

The central DA metabolism of all 32 patients was studied with the aid of the probenecid technique. The first test was carried out before medication was administered, after a period of 5–10 days without neuroleptic medication. The second test was done at the end of the first week of medication administration. The procedure of the probenecid test has been described elsewhere (16). Concentrations determined in the CSF were, in addition to HVA (17), 5-hydroxyindoleacetic acid (5-HIAA) (18) (the principal degradation product of serotonin), and probenecid (19). The treatment of any extrapyramidal pathology was always started after the second probenecid test.

The raters were unaware of the contents of the capsules and the results of the CSF determinations.

In the independent opinions of the attending physician and the supervising psychiatrist, all patients showed delusions and/or hallucinations. An idea that in all probability was inconsistent with reality but was nevertheless insusceptible to correction was considered a delusion. An experience was regarded as a hallucination if 1) in the patient's own words it occurred in a sensory modality (auditory, visual, gustatory, olfac-

tory, tactile, kinesthetic, or combinations of these), and 2) in the interviewer's opinion current objective stimuli were either totally absent or grossly inadequate to account for the experience (20). Patients suffering from melancholia (deep endogenous depression with delusions of guilt and/or poverty) were excluded from this study.

The group studied consisted of 19 women and 13 men. The average age of the women was 36 (range, 20–58), and that of the men was 40 (range, 19–65). Table 1 presents a general view of the predominant symptoms of these patients and the etiological factors to which the greatest importance was attached in a given case. The hospitalizations of 9 women and 5 men were due to relapses; 4 women and 4 men had a history of three or more previous hospitalizations for psychosis.

TABLE 1
Etiology and Symptoms of 32 Patients Treated with Neuroleptics

Item	Number of Patients, by Type of Neuroleptic		
	Chlorpromazine (N=12)	Haloperidol (N=10)	Perphenazine (N=10)
Schizophrenic "process"			
Paranoia	2	0	2
Delusions*	1	1	0
Hallucinations	0	0	0
Motility disorders	1	2	0
Cerebral process			
Paranoia	0	0	0
Delusions*	0	0	1
Hallucinations	1	0	0
Motility disorders	0	1	0
Extracerebral process			
Paranoia	1	0	1
Delusions*	1	0	1
Hallucinations	0	0	0
Motility disorders	0	1	0
Psychogenic factors**			
Paranoia	1	0	2
Delusions*	3	0	2
Hallucinations	1	1	1
Motility disorders	0	4	0

* Excluding paranoid delusions.
** Including sociogenic and neurotic factors.

Study 2

Forty patients per medication group were chosen at random from all patients seen by one of us (H.M.v.P.) for whom chlorpromazine, fluphenazine (Moditen), perphenazine, haloperidol, or chlorprothixene (Truxal) had been prescribed because of psychosis sometime during the years 1958–1975. These groups of 40 patients each were arbitrarily subdivided into high-dose and low-dose groups. Table 2 indicates which doses were considered low and which high. An effort was made to establish how many of the patients had been given an antiparkinson drug because of hypokinetic-rigid symptoms during the first month of medication. These patients were either treated or had their treatment supervised by one of us (H.M.v.P.). The age distribution in the 5 groups did not significantly differ.

Study 3

We also studied 43 patients treated for psychotic syndromes with 150–600 mg of chlorpromazine a day or with 3–15 mg of haloperidol a day (including 22 of the 32 patients in study 1) to establish whether a correlation existed between the CSF HVA response to probenecid before medication and the occurrence or nonoccurrence of hypokinetic-rigid symptoms during the first 3 weeks of medication administration. The motor symptoms were scored as described for study 1, and any necessity of antiparkinson drugs was also noted. Our policy is to prescribe these agents even for mild extrapyramidal disturbances if the patient complains about them. We do not give them prophylactically.

Statistical comparisons for studies 1, 2, and 3 were made using Student's t test for grouped or paired data (one tailed) and Bravais-Pearson correlation coefficients.

RESULTS

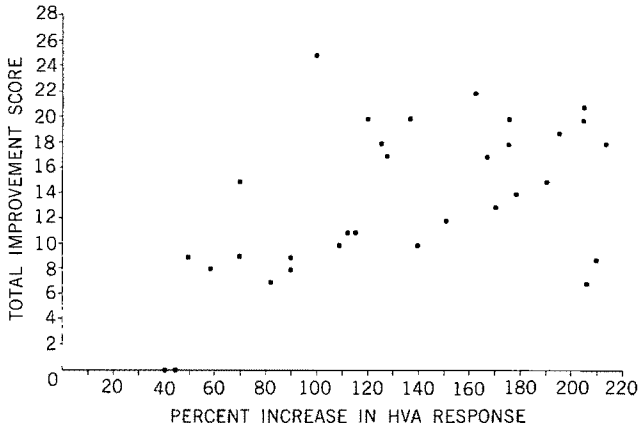
Study 1

Figure 1 shows the relation between the percentual increase of the HVA response to probenecid caused

TABLE 2
Need for Antiparkinson Medication for Hypokinetic-Rigid Symptoms During First Month of Neuroleptic Administration

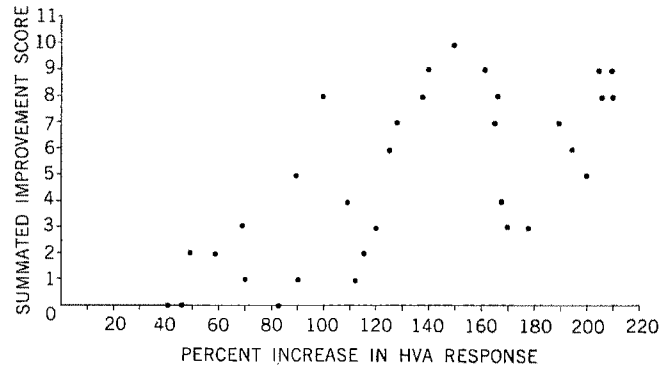
Neuroleptic	Low-Dose Medication Group				High Dose Medication Group			
	Dose Range (mg/day)	Number of Patients	Patients Given Antiparkinson Drug		Dose Range (mg/day)	Number of Patients	Patients Given Antiparkinson Drug	
			Number	Percent			Number	Percent
Chlorpromazine (N=40)	150–400	16	2	13	400–600	24	6	25
Fluphenazine (N=40)	7.5–15	8	2	25	15–30	32	9	22
Perphenazine (N=40)	6–12	10	2	20	12–24	30	8	27
Haloperidol (N=40)	3–6	15	3	20	6–15	25	8	32
Chlorprothixene (N=40)	150–300	22	3	14	300–600	18	5	28

FIGURE 1
Increase in HVA Response to Probenecid and Overall Clinical Improvement Scores* in 32 Patients After 1 Week of Neuroleptic Administration



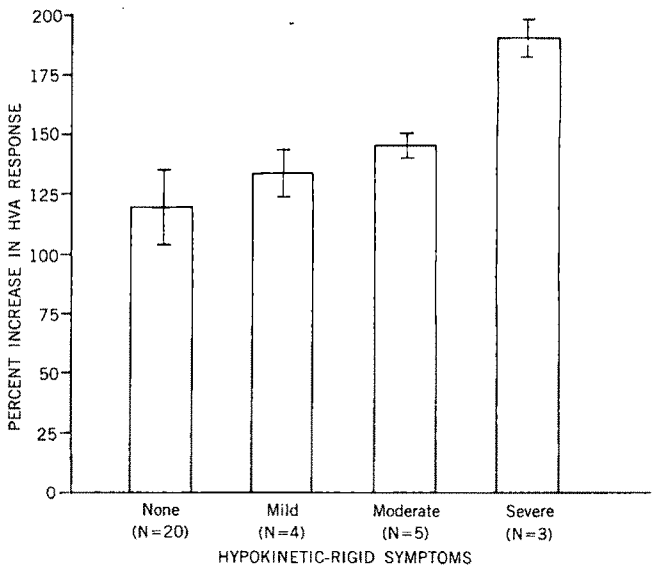
*A higher score indicates more improvement; a lower score indicates less improvement.

FIGURE 2
Increase in HVA Response to Probenecid and Summated Improvement Scores* for Delusions, Hallucinations, and Anxiety in 32 Patients After 1 Week of Neuroleptic Administration



*A higher score indicates more improvement; a lower score indicates less improvement.

FIGURE 3
Increase in HVA Response to Probenecid and Hypokinetic-Rigid Symptoms in 32 Patients During Neuroleptic Administration



by 1 week's medication with one of the three neuroleptics used and the improvement scores at the end of the first week of medication. The improvement score indicates the difference between the pretherapeutic total score and the mean of the total scores at the end of the first week of medication. The relation is statistically significant ($p<.03$). The same applies when we plot the summated scores for the three prototypically psychotic items, delusions, hallucinations, and anxiety (see figure 2; $p<.05$).

Figure 3 indicates the mean increase of HVA response to probenecid during neuroleptic medication in relation to pretherapeutic levels in the group of patients without, the group with mild, the group with moderate, and the group with severe hypokinetic-rigid symptoms. In patients with hypokinetic rigidity the HVA response showed a more marked increase than in those without motor side effects ($p<.05$).

The 5-HIAA accumulation in response to probenecid (a measure of serotonin turnover in the CNS) was not influenced by the neuroleptics used; this corroborates previous findings (10). The probenecid concentration in the CSF varied within normal limits (11.33 ± 4.95 μg/ml). The percentual increase in HVA accumulation did not correlate with the CSF probenecid concentration before or during medication. The average daily dose was 425 mg of chlorpromazine, 10 mg of haloperidol, and 20 mg of perphenazine.

Study 2

The retrospective study of patients who had been treated with neuroleptics of various types showed that the number of patients who required antiparkinson drugs during the first month of medication was larger among those given a high than among those given a low dose (see table 2). Within the low- and high-dose groups, however, the indication was established with virtually the same frequency whether the patient was treated with a phenothiazine derivative of the dimethyl series, one of the piperazine series, a butyrophenone, or a thioxanthene derivative.

Study 3

The correlation between pretherapeutic HVA response and the development of neuroleptic parkinsonism was investigated in 43 patients. Of the 23 patients given chlorpromazine, 8 were given a low dose and 15 received a high dose (see table 2 for definition of high and low doses). Two patients in the low-dose chlorpromazine group required antiparkinson medication for hypokinetic-rigid symptoms during the first 3 weeks of medication; 4 patients in the high-dose chlorpromazine group required this medication. In both groups the pretherapeutic HVA response was lower in

FIGURE 4
HVA Response to Probenecid Before Administration of Low or High Doses of Chlorpromazine and Hypokinetic-Rigid Symptoms in 23 Patients During First 3 Weeks of Drug Administration

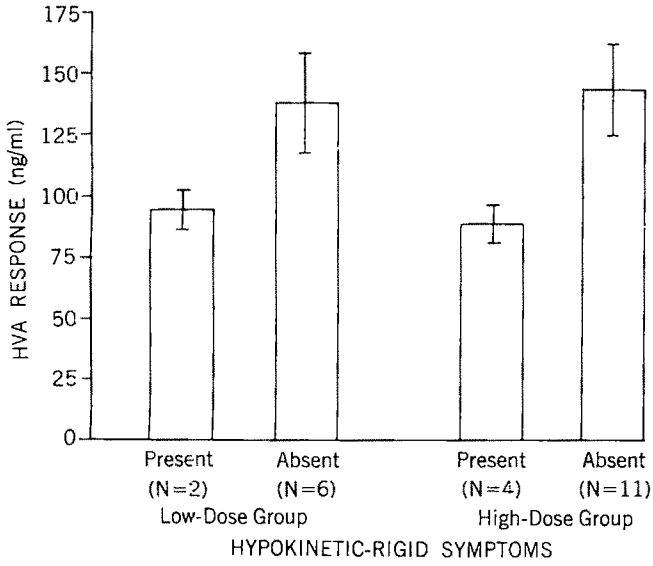
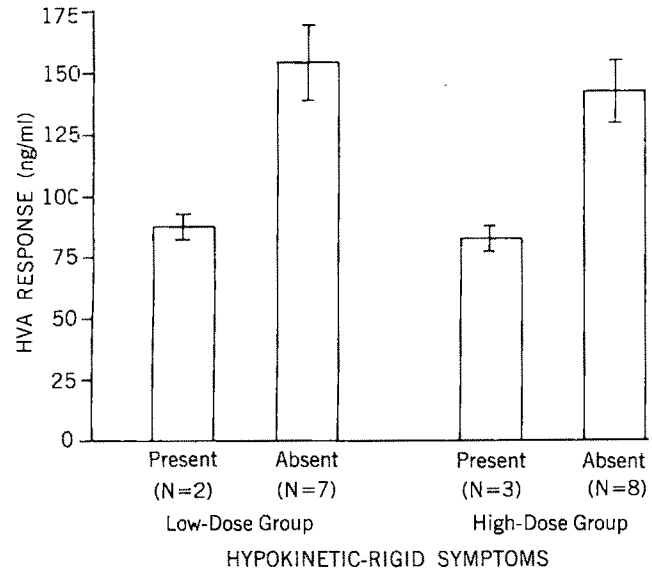


FIGURE 5
HVA Response to Probenecid Before Administration of High or Low Doses of Haloperidol and Hypokinetic-Rigid Symptoms in 20 Patients During First 3 Weeks of Drug Administration



patients with than in those without hypokinetic-rigid symptoms. The difference was not significant (see figure 4).

Of the 20 patients treated with haloperidol, 9 were given a low dose and 11 received a high dose. Two patients in the low-dose haloperidol group and 3 in the high-dose haloperidol group developed hypokinetic-rigid symptoms of such severity that antiparkinson medication was considered necessary. In the low-dose as well as in the high-dose group the HVA response was less marked in patients with than in those without hypokinetic-rigid symptoms. The difference was not significant (see figure 5).

Comparison of the 11 patients who developed hypokinetic-rigid symptoms during neuroleptic medication with the 32 patients who did not showed that the HVA response in the former group was significantly less marked than that in the latter ($p<.05$).

We divided the patients into low-dose and high-dose groups in order to eliminate the coincidence that low HVA responders were given mostly large doses of neuroleptics and thus ran an increased risk of extrapyramidal side effects. In that case the correlation between HVA response and motor symptoms would have been spurious.

The pretherapeutic 5-HIAA accumulation in response to probenecid did not correlate with occurrence or nonoccurrence of hypokinetic-rigid symptoms. Moreover, the two groups did not differ significantly in CSF probenecid concentration.

DISCUSSION

Neuroleptics of different chemical types increase the central DA turnover in test animals—a phenomenon that is probably secondary to a blocking of postsynaptic DA receptors. Insofar as the probenecid-induced accumulation of HVA in the lumbar CSF is an indicator of the DA turnover in the CNS (as we assume it to be), this is also the case in human individuals (10, 21–23). The present study found a positive correlation between the degree of increase in DA turnover caused by a neuroleptic in man and the neuroleptic's therapeutic effect. A comparable relation was demonstrated between DA turnover and the development of hypokinetic-rigid symptoms. This supplies a strong, direct argument for the contention that changes in DA metabolism are related to the occurrence of the clinical effects of neuroleptics. Human studies had previously yielded only one indirect argument in support of this view, i.e, the observation of Carlsson and associates (24) that the therapeutic effect of neuroleptics is potentiated by α-methyl-*p*-tyrosine (AMPT), which is an inhibitor of tyrosine hydroxylase and therefore of DA and noradrenaline (NA) synthesis.

Of course, this does not imply that the clinical action profile of neuroleptics is determined exclusively by changes in DA metabolism. Neuroleptics also influence the NA and acetylcholine metabolism, for example, but the clinical importance of this influence is unknown. In clinical experiments we observed no influence of chlorpromazine on the concentration in the CSF of 3-methoxy-4-hydroxyphenylglycol (MHPG), the principal central NA metabolite (10). However, we measured basal concentrations because MHPG transport is not probenecid sensitive; basal concentrations of monoamine (MA) metabolites in the CSF are a less sensitive indicator of MA turnover than the values af-

ter probenecid loading (25). It is currently not possible to obtain information on the human central acetylcholine metabolism; it is uncertain whether the choline concentration in the CSF is indicative of this (26).

The human nigrostriatal and mesolimbic DA systems cannot be separately assessed. Consequently, we do not know whether certain clinical effects of neuroleptics correlate with an influence on a given DA system. In the study of current neuroleptics this seems to present no serious disadvantage because, unlike Andén and associates (8, 9), we found their influence on both DA systems always to be parallel. A small increase in DA turnover in the one system is associated with only a small increase in the other, and vice versa (11). Furthermore, neuroleptics described by clinicians as causing little extrapyramidal activity do not exert a significantly less marked influence on transmission in nigrostriatal DA neurons than neuroleptics described as frequently provoking extrapyramidal symptoms (11).

On the basis of the available knowledge about the pathogenesis of Parkinson's disease, we considered it unlikely that the motor side effects of neuroleptics and blocking of DA receptors in the nigrostriatal system could be unrelated. The lack of correlation between DA effects and extrapyramidal effects of neuroleptics could be explained by differences in their anticholinergic potency, as described by Snyder and associates (27). The stronger their anticholinergic activity, the fewer side effects they would induce.

We studied another possible explanation: the clinical view that neuroleptics differ widely in their ability to provoke extrapyramidal symptoms might be biased. We found indications to this effect as far as hypokinetic-rigid symptoms are concerned. We have no similar data on hyperkinetic or dyskinetic side effects. In our retrospective study of five neuroleptics (three of the phenothiazines, one butyrophenone, and one thioxanthene derivative) (study 2) we established that the incidence of parkinsonian symptoms was lower at lower doses than at higher doses but that within a dose range (low or high) the incidence was virtually the same with the various neuroleptics. This raised the suspicion that occurrence of parkinsonian symptoms in response to a given dose of a certain neuroleptic is determined less by the intrinsic property of the drug than by the patient's individual susceptibility. This hypothesis was confirmed in that we demonstrated for two neuroleptics (chlorpromazine and haloperidol) (study 3) that within a certain dose range the HVA response to probenecid before medication administration was lower in patients who would than in those who would not develop hypokinetic-rigid symptoms.

Therefore, it seems that patients with a lower central DA turnover run an increased risk of developing hypokinetic-rigid symptoms when they are given neuroleptic medication. Should this suspicion be confirmed in a prospective study, the probenecid technique could be used to establish whether prophylactic antiparkinson medication is or is not indicated.

The degree of increase in HVA response caused by neuroleptic medication was positively correlated with the severity of extrapyramidal side effects as well as with the intensity of the antipsychotic effect. However, the conclusion that neuroleptics should be given in large doses until extrapyramidal symptoms are evident would be a hasty one. We are accustomed to considerable prudence in prescribing doses of neuroleptics. It is quite possible that with larger doses than those we give the correlation between HVA response and extrapyramidal symptoms would persist but the correlation between HVA response and therapeutic effect would be lost. Partly also in view of possible permanent damage to the extrapyramidal system, our findings do not tempt us for the time being to accept a more drastic dosage scheme (28).

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A Dopaminergic Mechanism in Mania

BY ROBERT H. GERNER, M.D., ROBERT M. POST, M.D., AND WILLIAM E. BUNNEY, JR., M.D.

The authors present a case study that explores the relationship of dopamine function and manic illness through the use of two drugs with relatively specific effects in stimulating and blocking dopamine receptors—piribedil (ET-495) and pimozide, respectively. Piribedil, as well as d*-amphetamine, was associated with manic episodes, while pimozide had an antimanic effect. These observations suggest that dopaminergic mechanisms may be involved in the mediation of manic episodes in at least some patients.*

A RELATIONSHIP of mania and depression to the central catecholamines dopamine and norepinephrine has been postulated by a number of authors (1–6). Their hypothesis states that depression is related to decreased functional catecholamines at critical synapses and that mania is related to an excess. However, neither the hypothesis nor the pharmacological agents upon which the hypothesis has been based clearly differentiate the relative roles for dopamine compared with norepinephrine.

This report describes a treatment program in which two compounds, piribedil and pimozide, enabled us to dissect a dopaminergic component of mood fluctuations in one patient. Piribedil (ET-495) acts primarily by directly stimulating dopamine receptors (7, 8). Pimozide, an antipsychotic agent, blocks dopamine receptors and does so relatively more specifically than other neuroleptics (9), although its effect on noradrenergic mechanisms is still being investigated (10, 11). In addition the patient received *d*-amphetamine, which increases functional catecholamine at the synapse by increasing release and blocking reuptake of dopamine as well as norepinephrine (12–14).

At the time this work was done, the authors were with the Adult Psychiatry Branch, National Institute of Mental Health, Bethesda, Md., where Dr. Gerner was Clinical Associate, Section on Psychobiology, Dr. Post is Chief, 3-West Clinical Research Unit, Section on Psychobiology, and Dr. Bunney is Chief, Adult Psychiatry Branch. Dr. Gerner is now Assistant Professor, Department of Psychiatry, University of California, Los Angeles, School of Medicine, Los Angeles, Calif. Address reprint requests to Dr. Post at the National Institute of Mental Health, Bldg. 10, Rm. 3S239, 9000 Rockville Pike, Bethesda, Md. 20014.

METHOD

Subject

The patient was a 47-year-old man whose family history revealed possible bipolar affective illness in three deceased second-degree maternal relatives. The patient's physical and psychosocial development was

unremarkable until he was 24, at which time he began to have severe depressions lasting approximately 6 to 12 months every 2 to 3 years. The patient and his relatives reported manic episodes lasting about 2 weeks and occurring less than 3 times a year. These episodes of mania and depression and those observed in the hospital met the research diagnostic criteria of Spitzer and associates (15) for primary affective disorder.

One year before his admission the patient had received a trial of lithium carbonate but did not take it reliably. For 18 months before his admission he had experienced manic episodes lasting 2 to 5 days once every 2 to 3 months. At the time of admission he had been continuously depressed for 3 months.

The results of a physical examination were within normal limits, and laboratory tests (including T_3, T_4, EKG, EEG, and brain scan) were normal.

Procedure

The patient was hospitalized on a 10-bed research unit at the National Institutes of Health. During the first 5 weeks of hospitalization his depression remained stable and unresponsive to individual and group psychotherapy. Informed consent was obtained after the nature of all medications and procedures was explained. All medication was given on a double-blind basis. Two intravenous infusions of *d*-amphetamine (15 and 20 mg/day, each administered over one minute) were given during the depressive episode in order to study mood elevation response to amphetamine and its possible value in predicting subsequent response to tricyclic antidepressant treatment (16–18). Piribedil was given in slowly increasing doses up to 200 mg/day as part of an antidepressant trial. Pimozide was given in doses up to 14 mg/day.

In order to further clarify alterations in the metabolism of the dopamine, norepinephrine, and serotonergic systems, lumbar punctures were performed to measure the respective metabolites of these systems—HVA (homovanillic acid), MHPG (3-methoxy-4-hydroxyphenyl glycol), and 5-HIAA (5-hydroxyindoleacetic acid). These were performed at 3 p.m., after restricted activity, in a drug-free state during episodes of depression and mania, as previously described (19).

Daily ratings of behavior and mood were made by experienced members of the nursing staff using the global Individual Mood and Behavior Check List (20) and the detailed Manic-State Rating Scale (21).

RESULTS

On the 37th day of hospitalization the patient received 15 mg of *d*-amphetamine intravenously. (Figure 1 shows the patient's responses to each of the drugs given.) He showed no antidepressant response on the day of amphetamine infusion, but on the 38th day he was insomnic, and 34 hours following the infusion he abruptly became manic. For 3 days he displayed symptoms that were classic and typical for him, including hyperactivity, hypertalkativeness, insomnia, intrusiveness, and lability of affect. He returned to his previous level of depression on the 42nd hospital day. Seven days later he received another *d*-amphetamine infusion (20 mg). The next day, 32 hours after the infusion, he again became manic, and this episode lasted 4 days.

After the patient started treatment with piribedil, his depression improved slightly but he still remained symptomatic. On the 12th day of treatment, the day after an increase in the dosage of piribedil, he became manic and displayed the same symptom constellation that he had shown previously. The episode terminated abruptly in 4 days and was followed by 2 nonmanic days, another 4 days of mania, and then 2 more nonmanic days. Piribedil was withdrawn when it became apparent that he was again entering a manic period. The patient continued to exhibit brief manias alternating in a regular fashion with 1 to 3 days of depression (average cycle length=5.5 days). His mood swings clearly had changed, becoming more frequent and more regular than at any previous time.

Treatment with the neuroleptic pimozide reduced the magnitude of the cycles, although mild mood changes continued to be detectable. In contrast to his behavior during manic episodes, the patient began sleeping every night, was able to retain all of his ward privileges, and was able to function well on his hospital job. This treatment with a relatively specific dopamine receptor blocker resulted in a marked diminution of his manic symptoms for about 4 weeks; during the 5th week a full-blown manic episode occurred in spite of continued treatment with pimozide.

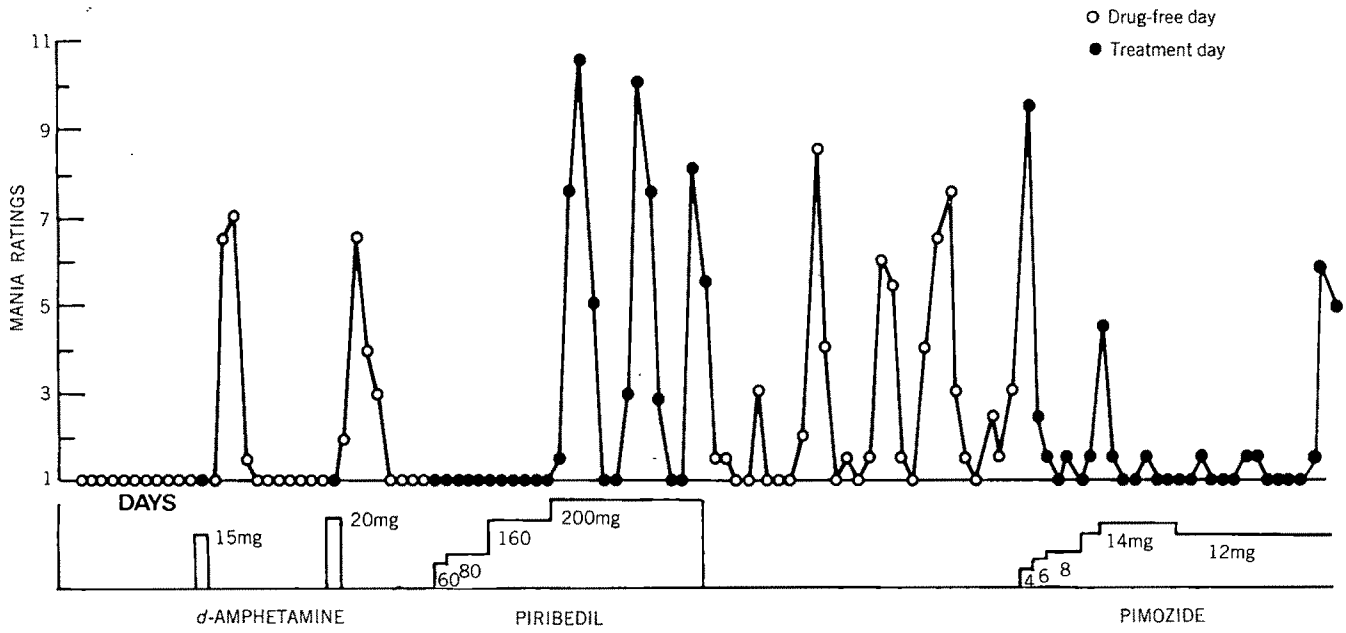
The patient then showed a partial response to lithium treatment, continuing to cycle less intensively and less frequently from hypomania to moderate depression. After the phenothiazine trifluoperazine (20 mg/day) was added to the lithium regime, and after several months of intensive milieu and psychotherapeutic work, the patient's mood swings ceased to enter the pathological range and he was discharged.

DISCUSSION

For this patient there appears to be a relationship between increased dopaminergic function and the occurrence of manic episodes and decreased dopaminergic function and the suppression of mania. Following two amphetamine infusions the patient became manic; during treatment with a relatively specific dopamine receptor stimulator, piribedil, he started having regular recurrent manic episodes that persisted following discontinuation of the drug. The manias were successfully treated with a relatively specific dopamine receptor blocking compound, pimozide. Thus all four separate pharmacological interventions illustrated in figure 1 were consistent with dopaminergic involvement in the manic episodes of this patient.

It is noteworthy that a lag of 32 to 34 hours occurred

FIGURE 1
Relationship of Mania to Dopamine Agonists and an Antagonist in One Patient



between the amphetamine infusions and the onset of manic episodes; this time factor may be important to understanding the biochemical processes involved in the triggering of mania. While there is considerable evidence for the role of dopamine in this patient's mania, it should be clarified that neither amphetamine nor piribedil is typically provocative of mania even in bipolar patients; of 20 patients given one or both compounds at the National Institute of Mental Health, this was the only patient who became manic (22, 23).

In addition to the effects on the patient's mania of drugs with relatively specific action on dopaminergic function, the cerebrospinal fluid (CSF) amine metabolite data for this patient support the role of dopaminergic systems in his manic episodes. The patient's HVA level during mania was 43 ng/ml, compared with 3 ng/ml during depression. MHPG levels were, atypically, lower during mania (5 ng/ml) than during depression (23 ng/ml). The 5-HIAA levels did not change (45 ng/ml, 44 ng/ml).

Support for a dopaminergic role in mania is found in other pharmacological and CSF studies. L-Dihydroxyphenylalanine (L-dopa), which affects the synthesis and turnover of dopamine more than that of norepinephrine, has precipitated hypomania in some but not all depressed patients (24–27). Fusaric acid, which decreases norepinephine synthesis by inhibiting dopamine β-hydroxylase, shows little or no alleviation of mania (28) while α-methyl-p-tyrosine (AMPT), which decreases the synthesis of both dopamine and norepinephine, has some antimanic effect (29). The efficacy of the phenothiazines and butyrophenones in mania (30) also suggests the importance of the dopaminergic system (31). The majority of investigators have found the baseline level of the dopamine metabolite HVA in CSF to be higher in mania than in depression, although not higher than in control groups (6). However, motor activity may also be an important factor in these relative increases in baselines levels of HVA during mania (32). In contrast, probenecid-induced accumulations of HVA may be low in both mania and depression (6).

While evidence for alterations in norepinephrine, serotonin, and other transmitters has also been reported in patients with manic illness, the purpose of this case report and brief review has been to highlight the possible involvement of a dopaminergic component in the onset of mania in at least some patients. Although all patients do not react to increases in dopamine function with manic episodes, a subgroup of patients with an increased susceptibility may ultimately be demonstrable using brief clinical pharmacological trials or assessment of amine metabolites in biological fluids. The use of relatively specific pharmacological treatment strategies appears to demonstrate an important role for dopamine in the manic episodes of the patient studied.

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Negative Effects of Melatonin on Depression

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In order to test the efficacy of the pineal neurohumor melatonin on depression, the hormone was administered in varying doses to six moderately to severely depressed patients and two patients with Huntington's chorea in a double-blind crossover study. Melatonin exacerbated symptoms of dysphoria in these patients, as well as causing a loss of sleep and weight and a drop in oral temperature. Melatonin increased cerebrospinal fluid 5-hydroxyindoleacetic acid and calcium in three of four patients studied. The authors discuss the implications of this finding.

PREVIOUS REPORTS (1–3) of mood improvement in parkinsonian patients and normal human subjects receiving the pineal neurohumor melatonin prompted our group to undertake a therapeutic trial of melatonin in depression. (Table 1 reviews studies reporting the psychological effects of melatonin.) Melatonin has been shown to increase brain serotonin in animals (11, 12) and urinary 5-hydroxyindoleacetic acid (5-HIAA) in parkinsonian patients (9) and to induce and prolong sleep in human subjects (1, 3, 7–9) and animals (13–15). These properties of melatonin led to our interest in this neurohumor as a possible therapeutic agent in depression, since sleep is frequently reduced in depressive illness and brain serotonin has been hypothesized to be decreased in some forms of depression.

Further rationale for such a trial came from observations that melanocyte-stimulating hormone (MSH), an antagonist of melatonin (7), produces in animals an exaggerated response to noxious stimuli (16, 17). Conversely, a double-blind study reported low-dose oral melanocyte-stimulating-hormone-release-inhibiting-factor (MIF) a more effective antidepressant than placebo in four of five patients (18).

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METHOD

Six patients with major primary depressive illness, defined according to the criteria of Spitzer and associates (19), and two patients with Huntington's chorea were hospitalized on research wards at the National Institute of Mental Health. Informed consent was obtained after the nature of the treatment and procedures was fully explained. The patients received varying amounts of melatonin either orally, divided into four equal doses daily, or by intravenous infusion once or twice daily for varying periods of time. The course of active oral melatonin was preceded and followed, for at least one week, by administration of placebo capsules identical in appearance, in a double-blind crossover design. Similarly, intravenous infusions of the active hormone were randomized with placebo infusions on a double-blind basis.

Behavioral ratings were obtained twice daily by consensus of a trained nursing research team (who were blind to all medications) using a modification of the Bunney-Hamburg Mood and Behavior Rating Scale (20), including ratings, on a 15-point scale, of such global items as depression, mania, psychosis, anxiety, and anger (21). The mean values for each item during the 7 days immediately preceding administration of melatonin, the variable number of days at the peak dose, and the placebo week following discontinuation of melatonin were employed in assessing the significance of drug-associated changes by analysis of variance.

An estimate of each patient's total nighttime sleep was determined by nurses making 30-minute checks between midnight and 8 a.m., and oral temperature by electronic thermometer and fasting weight were measured daily at 8 a.m. Blood samples were drawn twice weekly at 8:30 a.m. to monitor endocrine, metabolic, renal, hepatic, and hematologic status. Before melatonin administration and at peak dose, lumbar punctures were performed, in three patients at 9 a.m. without probenecid, and in patient 2 at 3 p.m. following oral administration of probenecid (100 mg/kg) (22) and 15 hours of bed rest.

Cerebrospinal fluid (CSF) 5-HIAA was measured by spectrofluorometric techniques as previously described (22). CSF and serum total calcium and magnesium were measured by atomic absorption spectrometry (23).

TABLE 1
Psychological Effects of Melatonin: A Review of the Literature

Study*	Number of Subjects	Type of Subjects	Length of Study (days)	Peak Daily Dose (mg)	Method of Administration	Psychological Effects
Lerner and Case (4)	2	Normal subjects	1	200	Intravenous	Mild sedation
Norlund and Lerner (5)	6	Normal subjects	28	1000	Oral	Sedation
Altschule (6)	2	Subjects with schizophrenia in remission	1	300	Intravenous	Marked exacerbation of symptoms almost immediately following infusion, with active hallucinations lasting 18 to 36 hours
Van Woert and Cotzias**	2	Parkinsonian patients	1	2000	Oral	Behavior not reported
Cotzias and associates (7)	1	Parkinsonian patient	51	1350	Oral	Somnolence, control of tremor
Anton-Tay and associates (1)	15	Normal subjects	1	100	Intravenous	Sleep induction, comfort, elation, subjective improvement
	5	Parkinsonian patients	28	1200	Oral	Sleep induction, comfort, elation, subjective improvement
Papavasiliou and associates (8)	11	Parkinsonian patients	35	6600	Oral	Tranquilization, somnolence
Shaw and associates (2)	4	Parkinsonian patients	28	1000	Oral	Tranquilization, relaxation, contentment
Cramer and associates (3)	15	Normal male subjects	1	50	Intravenous	Immediate sedation, decreased psychomotor activity, and shortened sleep latency with an otherwise normal sleep EEG; increased emotional stability noted on the day following bedtime infusion
Anton-Tay (9)	6	Normal subjects	6	1000	Oral	Sleep EEG effects: increased REM density, increased phase 2, and decreased phase 4
Smythe and Lazarus (10)	10	Normal male subjects	1	1000	Oral	Behavior not reported

* Studies are listed in chronological order, from 1960 to 1974.
** Cited in (5).

RESULTS

Figure 1 shows the effect of melatonin on the psychological state of the eight patients. Not only was melatonin, by either method of administration, ineffective as an antidepressant, but in every patient it caused some exacerbation of dysphoric mood. Ratings of depression and anger increased significantly for the group as a whole ($p<.01$), while psychosis emerged de novo or worsened in four patients. Anxiety increased as well, although not significantly ($p<.10$).

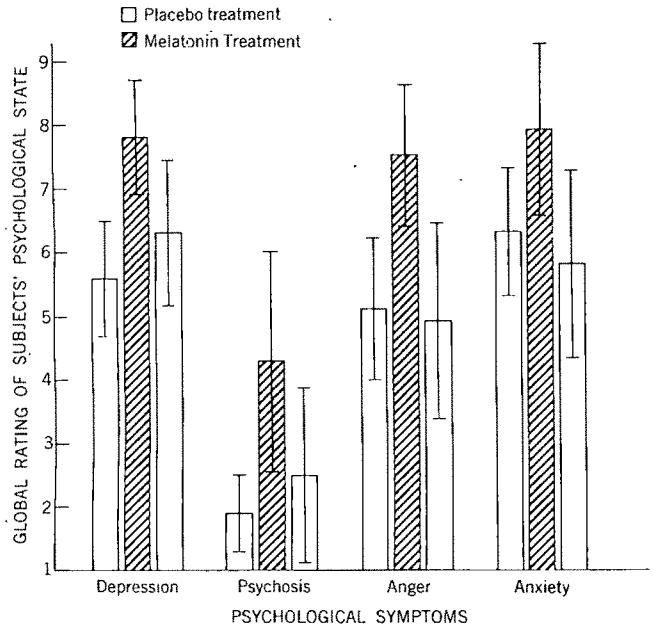
Two cardinal elements of the vegetative dysfunction characterizing endogenous depression—loss of sleep and weight—seemed specifically worsened during melatonin treatment (see table 2). Nurses' checks, although such crude estimates must be interpreted with caution (24), suggest a drop in nighttime sleep averaging 2.0 hours ($p<.01$), and the magnitude of sleep loss seemed related to the peak worsening of depression in each patient. Patients on melatonin also had an average weight loss of 1.8 kg ($p<.01$). In addition, oral temperature measured at 8 a.m. decreased by an average of 0.8C ($p<.01$) (table 2).

CSF 5-HIAA as well as CSF calcium increased markedly in three of four patients tested (table 3). The sole exception, patient 3, was also the only patient whose depression ratings did not increase on melatonin.

CASE REPORTS

Case 1. This 66-year-old woman had an 18-year history of episodic severe unipolar depression marked by prominent anorexia, social withdrawal, psychomotor retardation, and marked morning awakening. Each of her 12 prior episodes had necessitated hospitalization and parenteral feedings and, despite numerous trials of antidepressant medication, had finally responded only to ECT. During her 24-day trial of oral melatonin (peak dose=1100 mg/day), she developed a clear and dramatically dose-related exacerbation. Figure 2 demonstrates graphically the high correlation of nurses' ratings of psychological state with the dosage of melatonin this patient

FIGURE 1
Effect of Melatonin on Subjects' Psychological State (N=8)*



*Significant differences ($p < .01$, by analysis of variance) were found for the ratings of depression and anger when melatonin treatment was compared with preceding and following placebo treatment.

received. The patient's extreme withdrawal progressed to total mutism, anorexia, rigid immobility, enuresis, and encopresis. Furiously negativistic, she closed her eyes and exhibited alarm when the staff attempted to assist her in eating, grooming, or locomotion. On melatonin the usual lessening of this patient's depressive stupor during the evening disappeared. The exacerbation in her illness lessened slowly during the week following abrupt substitution of placebo.

Case 2. This patient was a 40-year-old woman with a 6-year history of alternate episodes of mania and depression, each requiring hospitalization; her index admission was for a moderately severe retarded depression that was worse during the evenings. During her first week on oral melatonin she developed an extreme lability of mood with sudden unprovoked outbursts of tears, rage, or terror. At peak dose (1600 mg/day) she developed looseness of associations, idiosyncratic expression, bizarre and inappropriate dress and demeanor, ideas of influence and reference, and the appearance for the first time of self-accusatory auditory hallucinations, blocking, and episodes of waxy flexibility several minutes in duration. An abrupt remission of all psychotic symptoms, coupled with a considerable lessening of depression, occurred one day after substitution of placebo following a 16-day trial of melatonin. She subsequently showed further improvement in her depression during lithium carbonate administration.

Case 3. This 44-year-old man had a 10-year history of retarded bipolar depression with episodic alcoholism. While on oral melatonin at a peak dose of 1200 mg/day, no affective worsening was reflected in his global depression ratings, but this patient did report increased sadness, difficulty concentrating, early morning insomnia (although nurses' sleep checks do not reflect this), and daytime drowsiness. He became more withdrawn, developed a prominent anorexia, and for the first time in 4 years of effortless abstinence expressed a desire for alcohol. These symptoms improved a few days after he completed a 9-day trial of melatonin. Later, this patient did not show a clear response to lithium, but he did improve following administration of tricyclic antidepressants.

Case 4. This patient was a 31-year-old woman with a 3-year history of mild to moderate unipolar depression. Although early in her hospitalization she suffered from mild insomnia, anorexia, and agitation, her depression responded well to hospitalization and psychotherapy without antidepressant medication, and she was substantially improved at

TABLE 2
Effect of Melatonin on Subjects' Weight, Amount of Sleep, and Temperature

Item	Patient 1	2	3	4	5	6	7	8	Mean	SEM	F	Significance
Weight (kg)												
Predrug	50.5	80.8	78.5	52.8	38.2	57.6	56.8	59.6	59.5	5.0	—	—
Melatonin	47.0	77.9	77.0	52.8	37.3	55.2	56.0	58.4	57.7	4.8	—	—
Postdrug	48.0	78.0	77.5	53.9	38.4	57.3	56.0	59.0	58.5	4.8	—	—
Analysis	—	—	—	—	—	—	—	—	—	—	9.20	$p < .01$
Sleep (hours)												
Predrug	8.0	6.0	7.0	7.0	6.5	6.5	8.0	6.0	6.9	.3	—	—
Melatonin	6.5	3.0	7.0	5.5	1.5	6.0	6.0	4.0	4.9	.7	—	—
Postdrug	6.5	4.5	7.5	7.0	4.5	8.0	6.0	5.0	6.1	.5	—	—
Analysis	—	—	—	—	—	—	—	—	—	—	9.00	$p < .01$
Temperature (C)												
Predrug	36.4	36.8	36.1	36.0	36.4	36.8	36.2	37.0	36.5	.1	—	—
Melatonin	35.2	35.0	36.0	35.8	36.0	36.0	35.4	36.0	35.7	.1	—	—
Postdrug	36.0	36.4	36.2	36.2	36.0	36.4	36.8	36.2	36.3	.1	—	—
Analysis	—	—	—	—	—	—	—	—	—	—	9.64	$p < .01$

TABLE 3
Effect of Melatonin on CSF 5-HIAA and CSF Calcium of Four Depressed Patients

Item	Patient 1	2	3	4
CSF 4-HIAA (ng/liter)				
Predrug	24.00	129.00*	21.00	22.00
Melatonin	150.00	306.00*	22.00	177.00
CSF calcium (mEq/liter)				
Predrug	2.35	2.35	2.50	1.90
Melatonin	2.55	2.40	2.50	2.30

* In patient 2, both CSF specimens were obtained following administration of probenecid.

the time her brief trial (3 days) of oral melatonin was begun. She became increasingly tearful and drowsy on melatonin and was felt by the staff to be subtly more distant and withdrawn. She complained of easier fatigability, decreased interests and appetite, and marked morning insomnia at the peak dose of 1200 mg/day.

Case 5. This patient, a 48-year-old woman with a moderate unipolar depression who received intravenous melatonin for 7 days (peak dose=250 mg/day), experienced disturbed sleep, gloominess, argumentativeness, feelings of unreality, and increased tearfulness and reported subjective increases in depression while on melatonin.

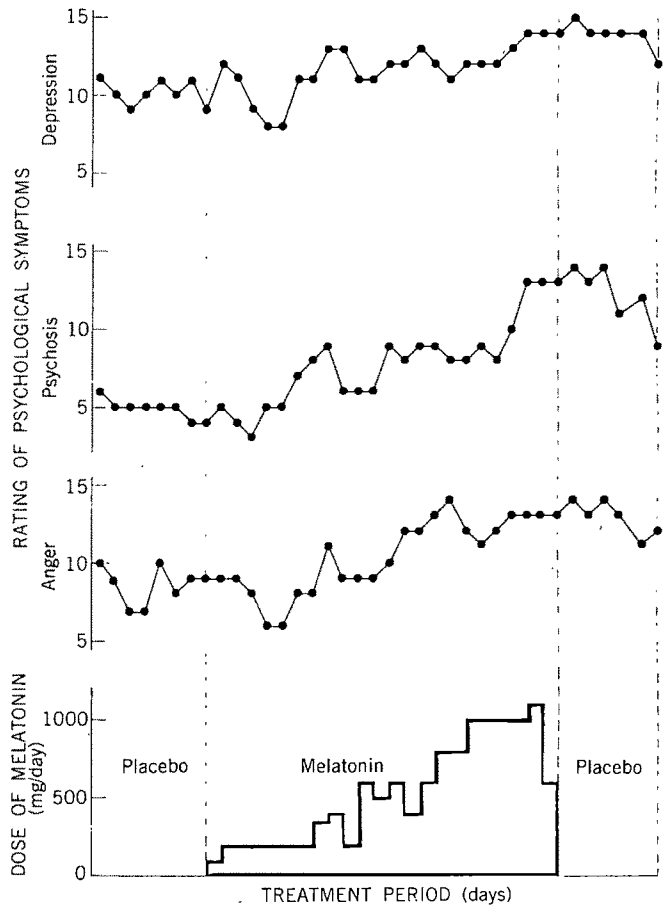
Case 6. This 47-year-old man with a moderately severe retarded bipolar depression received intravenously for 3 days the least melatonin given in this study (peak dose=150 mg/day) and showed little behavioral change other than an episode of breakthrough crying within an hour after the infusion of his highest dose. This was the only such crying in his entire hospitalization.

Cases 7 and 8. A 53-year-old woman and a 39-year-old woman had Huntington's chorea with moderate to severe motor dysfunction but only mild mental impairment. Although both were euthymic and without psychotic symptoms before the drug trial, both showed depression and psychomotor retardation during melatonin (peak dose=1200 mg/day) but no alteration in cognitive function and no emergence of psychosis. Patient 7 received melatonin for 12 days, patient 8 for 9 days.

DISCUSSION

The increased dysphoria that we observed in this small number of depressed and choreic patients was associated with sad or hopeless facial and verbal expressions and appeared to be a clear exacerbation of depression and not mere nonspecific sedation, as had been frequently reported in previous trials with human subjects (see table 1). The study was discontinued because of the evidence that melatonin was making this population of patients worse. These findings stand in striking contrast to the "elation" (1), "contentment" (2), and "increased emotional stability" (3)

FIGURE 2
Effect of Melatonin on Psychological State of Patient 1*



*During the period of active drug administration, the correlations between total daily dose of melatonin and ratings of specific psychological symptoms of patient 1 were .54 for anger, .70 for psychosis, and .57 for depression.

reported for other neurologically disordered patients and normal control subjects. Different experimental settings, closer attention to psychological effects, double-blind methodology, and the use of subjects with preexisting psychiatric morbidity or biological vulnerability could have contributed to our discrepant findings. Of possible relevance to our clinical observations are the reports that melatonin reduces spontaneous or appetitive activity in animals at doses even lower by weight than those we employed (16, 25–31).

Our results are consistent with those of Altschule (6), who noted florid exacerbation of schizophrenic symptoms following administration of intravenous melatonin to two previously recovered schizophrenic patients. The development of psychotic symptoms we saw during melatonin administration in the four most severely depressed patients is noteworthy since a variety of psychotomimetic and stimulant agents increase melatonin synthesis (dimethyltryptamine, bufotenine, mescaline, LSD, dimethoxyphenylethylamine [32], amphetamine [33], cocaine [34], and L-dopa [35]), while the neuroleptics diminish it (36)

and augment release of MSH from the pituitary (37).

It has been postulated (38–43) that endogenous or exogenous melatonin might undergo cyclic dehydration to form carbolines with either reserpine-like depressant or psychotomimetic properties. More rapid accumulation of melatonin or such metabolites or greater sensitivity to them might explain the dramatically different behavioral effects of melatonin in psychiatric patients than in normal subjects (44, 45).

Doses of exogenous melatonin administered four times a day might effectively have obfuscated the normal nocturnal, pulsatile synthesis and release of endogenous melatonin (46–49) as well as circadian variations in any behavioral characteristics referable to it. Consequently it is particularly interesting that the previously distinct diurnal differences in symptom severity of patients 1 and 2 became indiscernible at the peak dose of the hormone. If exogenous melatonin were in fact altering critical circadian rhythms, this would provide another explanation of the different effect of melatonin on normal control subjects than on psychiatric patients, who may have abnormal circadian rhythms initially (50–52). We (53) and others (54) have observed a marked, usually transient antidepressant effect of one night's sleep deprivation in severely depressed patients but not in less depressed patients or control subjects. It is an intriguing possibility that elimination of a sleep- or dark-related increase in melatonin might account for the mood improvement in sleep-deprived depressed patients.

The possible role of altered serotonin and calcium metabolism in production of the dysphoric changes observed must likewise be considered. The finding of markedly increased CSF 5-HIAA in three of four patients is consistent with earlier data from animals and human subjects. Recent evidence suggests that the increase in central serotonin turnover occurring with melatonin administration represents a compensatory response to a primary blockade of serotonin receptors by melatonin (9, 10, 55–57). Indeed, melatonin prevents release of growth hormone by serotonin (56, 57). The large increases in 5-HIAA in those patients who demonstrated the clearest worsening while receiving melatonin is consistent with studies showing that 5-HIAA in CSF decreases following various antidepressant treatments (58, 59).

Similarly, the elevation of CSF calcium associated with melatonin administration to the same three patients complements the finding that antidepressants may decrease CSF calcium (60). Several preliminary findings link the pineal to humoral calcium regulation: in rats, pinealectomy results in hyperplasia of the parafollicular (calcitonin-producing) cells of the thyroid (61) and hypofunction of the parathyroid (62), which can be restored to normal by administration of melatonin (63). In an attempt to synthesize these findings we would postulate that melatonin exerts a tonic inhibition of calcitonin release from the thyroid and other sites, possibly by blockade of serotonergic mechanisms involved in that release (64). It is also intriguing that in one patient restriction of dietary calcium, which may produce pineal atrophy (65), has been reported to lessen the duration and severity of acute episodes of periodic psychosis (66).

While this preliminary trial indicates that melatonin is ineffective as an antidepressant in this patient population and may even worsen mood in patients with moderate to severe depression, further exploration of the role of this neurohormone in affective and other psychoses appears to be indicated.

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Thyrotropin-Releasing Hormone: Differential Antidepressant and Endocrinological Effects

BY FRANKLIN W. FURLONG, M.D., GREGORY M. BROWN, M.D., AND MADELEINE F. BEECHING, R.N.

In a double-blind study, three depressed subjects received thyrotropin-releasing hormone (TRH) on three successive days, and one subject similarly received placebo; all subjects were then given ECT. Two of the patients given TRH responded to ECT. One patient's reaction is of special significance because of her response to ECT, diminished thyroid-stimulating hormone response to TRH, increased growth hormone and prolactin response to stress, and antidepressant effect of TRH. These findings raise the possibility that previous conflicting reports about TRH's antidepressant effects stem from the combined study of endocrinologically distinct depressive subgroups and strongly suggest that there may be a specific subgroup that is responsive to TRH.

RECENTLY, THERE HAVE been conflicting reports that a hypothalamic substance, thyrotropin-releasing hormone (TRH), has an unusual antidepressant effect.

TRH is a tripeptide produced in the mammalian central nervous system. Prange and associates (1) and Kastin and associates (2) first studied the effects of TRH in severely depressed women with a diagnosis of manic-depressive disorder, depressed type, or involutional depression. In the double-blind crossover study of Prange and associates, each patient received a single dose of TRH or saline; this was followed 1 week later by a single dose of saline or TRH. In the double-blind crossover study by Kastin and associates, each patient received a daily intravenous injection for 6 consecutive days; for 3 successive days the patient received saline solution and for the next 3 days, TRH. These researchers agreed on the following findings:

1. TRH produced an antidepressant effect beginning 1 to 6 hours after infusion and lasting from several hours to 3 days.
2. Thyroid-stimulating hormone (TSH) (thyrotropin) response was, with one exception, markedly flat, although the patients were free of obvious endocrinological disorder.
3. Physical side effects were mild and consisted of variable flushing, nausea, and a sense of warmth; all of these side effects were often not present, and they could frequently be avoided by slow injection of TRH.

In these studies, unlike later ones, there were marked differences in response between patients receiving saline placebo and TRH. In the study by Prange and associates (1), saline was never superior to TRH, but TRH was superior to saline in 5 of 12 trials. In Kastin and associates' study (2), none of the patients improved during control testing but all patients receiving TRH improved, although 1 did not respond until the third infusion. Subsequently, in a study of normal women, Prange and associates (3, 4) confirmed that physical effects occurred within minutes while psychological effects were delayed; further, the intensity of the mental change was unrelated to the intensity of the side effects and negatively related to TSH response.

Following these studies, there were further positive results with TRH (5) but some conflicting negative findings as well. Ehrensing and associates (6) reported on 8 patients who had major depressions and who received either 1000 μg of TRH or saline for 3 days in a double-blind study. Only 1 patient improved substantially with TRH. Further single-blind administration of TRH for 7 days also failed to produce positive results in the sample. In spite of the lack of antidepressant effect, plasma TSH and prolactin responses to TRH were distinctly diminished in 3 of the most severely depressed patients. Similarly, Coppen and associates (7) showed essentially no antidepressant effect of TRH although again there was evidence that TSH response was impaired in some depressed patients. Other studies (8, 9) have also failed to show any statistical superiority of TRH to placebo in a variety of depressive disorders.

The purpose of the present study was two-fold. We wished to retest the earlier observations on the effects of a single TRH injection, repeated daily for 3 days, on the affective state of patients suffering from in-

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volutional melancholia or endogenous depression (manic-depressive disorder, depressed type). In addition, we wished to study the association between clinical and hormonal response to TRH and affective changes during a subsequent course of ECT.

METHOD

Subjects

From the inpatient population of the Clarke Institute of Psychiatry, a university teaching hospital, we recruited all the patients who met the criteria for inclusion in the study and agreed to participate. They had all been diagnosed as suffering from either involutional melancholia or endogenous depression (manic-depressive disorder, depressed type) as judged by the treating psychiatrist and the research psychiatrist (F.W.F.) in charge of the project. The treating psychiatrist had made a previous independent clinical judgment that ECT was the treatment of choice for each patient's existing affective state. At the same time the treating psychiatrist believed that the delay in receiving ECT due to the TRH trial did not involve any significant hazard to the patient.

The subjects were physically normal. They showed no evidence of thyroid disease on the basis of physical examination, history, and laboratory tests (T_3 resin uptake and T_4). None of the subjects was an involuntary patient or was mentally subnormal. None showed any evidence of epilepsy, organic brain syndrome, or significant abnormalities based on laboratory tests and physical examination. The sample included only 1 woman who was of childbearing age; none of the female subjects was currently receiving hormonal medication. All of the subjects received a score of 20 or higher on the Hamilton Depression Rating Scale (10) at the time of the initial assessment and following a 3-day placebo washout period. After the nature of the study had been fully explained to them, all of the patients signed a statement of informed consent that had been approved by the university's committee on human experimentation.

Procedure

After a 3-day placebo washout period each patient was assigned to a group receiving TRH (N=3) or to a group that was to be treated identically except for receiving saline-placebo infusion instead of TRH (N=1). Assignment was done according to a matching procedure that was intended to achieve a rough balance for diagnosis, age, and sex if a larger number of subjects had been enrolled. The raters, nurses, and investigators did not know which patients had been assigned to each group; only the head pharmacist had this information. Placebo was the only medication given during the washout and infusion periods. During the period of ECT there were no restrictions on the use of medications. Prior to washout patient 1 received 30 mg of flurazepam at bedtime as needed, 5 mg of diazepam as needed, and 100 mg of amitriptyline once a day. Patients 3 and 4 received 30 mg of flurazepam at bedtime as needed, and patient 4 also received 5 mg of diazepam as needed and 200 mg of desipramine daily.

Each patient received an injection of placebo or 500 μg of TRH in saline solution, injected slowly over one minute; this procedure was repeated on 3 successive mornings. One or 2 days following the last injection the subjects were started on a course of ECT administered 3 times a week. The patients were supine during the first hour after the injection but were subsequently permitted to move about their rooms. A continuous intravenous drip was maintained for the first hour to permit painless removal of blood samples and was then discontinued.

The rater remained with the subjects for 6 hours following each of the 3 injections. The Hamilton depression scale was administered at the time the subjects were assessed for inclusion in the project and after washout, as well as just prior to injection and 4 hours after each injection. It was also administered on the morning following the last injection and on mornings following ECT sessions. The 10-cm scale, used essentially as described by Prange and associates (1), was completed immediately prior to infusion and hourly for 6 hours on each of the 3 injection days and subsequently whenever the Hamilton scale was administered. In this test a 10-cm line is drawn on a sheet of plain paper; one end (10 cm) is marked "As well as I could be" and the other end (1 cm), "As depressed as I could be." The patient marks where he stands at the moment of testing. The Zung Self-Rating Depression Scale (11) was administered at the same times. T_3 resin uptake and T_4 were repeated at the end of the injection period of 3 days, as were all of the standard laboratory measures. The patients' temperature, blood pressure, pulse, and respiration were recorded at the same intervals.

Plasma TSH, prolactin, and growth hormone (GH) were measured by double antibody radioimmunoassay using materials and directions supplied by the National Pituitary Agency, under a program supported by the National Institute of Arthritis, Metabolism, and Digestive Diseases. TSH, prolactin, and GH were measured 15 minutes before infusion, immediately before infusion, and at 15, 30, 45, and 60 minutes after infusion.

RESULTS

Table 1 summarizes the relationship between the patients' initial ratings and clinical and endocrinological responses to TRH and stress. The main interest lies in the relationship observed in 1 subject among marked subjective response to TRH, abnormal TSH response, marked GH and prolactin response to stress, and response to ECT.

Clinical Findings

Patient 1 was a 50-year-old woman with a diagnosis

TABLE 1
Relationship Between Initial Scale Ratings and Clinical and Endocrinological Responses to TRH and Stress

Item	Patient 1	2	3	4
Zung scale rating	60	40	34	28
Hamilton scale rating	43	22	35	46
Clinical response to TRH	Yes	—*	No	No
Clinical response to ECT	Yes	No	Yes	No
Mean maximum endocrinological response**				
TSH (μU/ml)	0.1	0.0	11.0	14.0
Prolactin (ng/ml)	82.0	4.7	78.0	17.0
GH (ng/ml)	22.0	0.0	3.0	0.1

*Patient received placebo rather than TRH.
**Mean of 3 responses. The criteria for response to TRH and stress was an increase of 5 μU/ml for TSH and 5 ng/ml for prolactin and GH.

of manic-depressive disorder, depressed type. The initial self-rating on the day of the first injection was 1 cm. She reported subjective improvement (rated at 5 cm) after the first injection; improvement reached a maximum at 1 hour and fluctuated thereafter. There was a similar response on the second day, with a peak of 6 cm at 4 hours. Infusion on the third day resulted in improvement from an initial score of 1 cm to a maximum of 7 cm at 4 hours. The Hamilton depression scale, administered at hours 0 to 4 on the days of the injections, recorded a corresponding rater-assessed improvement. During the course of ECT improvement was first noted after 2 sessions and maximum improvement after 3 sessions; the patient received a total of 8 sessions. All major symptoms of her depressive state remitted, and her Hamilton depression score dropped from 43 to a final score of 0. Scores on the Zung depression scale and the 10-cm scale were consistent.

Patient 2, a 50-year-old woman, had been diagnosed as suffering from involutional melancholia. She received placebo infusion. She noted a peculiar smell and taste during placebo infusion, which was probably suggested by the description of possible side effects in the consent form. She showed no beneficial response to the infusion and minimal response to the subsequent course of ECT. The significance of this subject for the study is the baselines she provided for establishing hormonal response.

Patient 3 was a 39-year-old woman suffering from manic-depressive disorder, depressed type, with a history of 2 previous depressive episodes responsive to ECT. She reported nausea 2 hours after the first injection. There was no evidence of any clinically consistent response to TRH injection. During the subsequent course of ECT she showed improvement after 4 sessions, with maximum improvement after 10 sessions. She received a total of 12 sessions.

Patient 4 was a 53-year-old man with a diagnosis of manic-depressive disorder, depressed type. He had had 3 previous admissions for depression, one of which had responded to a course of 9 ECT sessions. During the placebo washout period he complained of such side effects as dizziness, which he attributed to the placebo. There were no consistent changes in affect during TRH injection. The patient received a course of 8 ECT sessions with no clear-cut improvement, and ECT was discontinued.

Endocrinological Findings

In patient 2 (placebo) there were no alterations in TSH or GH (see table 1). Prolactin was elevated beginning 15 minutes after venipuncture on the first occasion just prior to injection of placebo.

Of the 3 subjects receiving TRH, patients 3 and 4 showed TSH elevation on each occasion, while patient 1 showed no TSH elevation. In patients 3 and 4 the TSH response diminished in magnitude on the second and third occasions, possibly because of feedback effects since it is known that increased blood thyroid hormone levels will decrease pituitary TSH response to TRH. These 2 patients also showed an elevation in prolactin. Of the 6 TRH injections that produced a TSH response, only 1 was accompanied by GH elevation. In the single subject (patient 1) who showed no TSH elevation in response to TRH, both GH and prolactin were elevated during each of the 3 sessions. GH and prolactin elevations paralleled one another on each occasion, and during 2 of the sessions the initial elevation preceded the injection of TRH. Patient 1 showed normal T_3 resin uptake and T_4 before and after the series of infusions and at the end of the course of ECT.

DISCUSSION

While previous studies have disagreed about the antidepressant effect of TRH injection, they have rather consistently reported an overall tendency toward flattened TSH response in some depressed patients. The relationship between abnormal TSH response and clinical response is neither consistent nor clear. This study also attempted to relate clinical and endocrinological responses to the effects of a subsequent course of ECT.

Kastin and associates (2) reported that TSH responses to TRH were markedly decreased in 4 of their 5 subjects and there was a marked overall clinical response to TRH. Prange and associates (1) reported that in 8 of 10 subjects TSH response was at the extreme lower limit of normal and in 2 patients it was lower. Coppen and associates (7) found no evidence for clinical action but reported that TSH response was impaired in some depressed subjects. There was a tendency for depressed female patients to demonstrate a reduced TSH response compared with control subjects. While those researchers reported no clinical response, the evidence for abnormal TSH response was

less striking than in the 2 earlier studies. Another study (6) found that TRH at doses of 1000 μg did not produce clinical benefit. Plasma TSH and prolactin responses to TRH were diminished in 3 depressed patients. The flattened TSH response to TRH seemed to correlate with severe endogenous and involutional depressions. The most severely depressed patients had a flattened TSH response. The only patient to show a significant clinical improvement while receiving TRH had a blunted TSH response. Ehrensing and associates (6) suggested that the prime value of TRH might be as a diagnostic tool in distinguishing among various subtypes of depression. In retrospect, it appears that the earlier studies that reported positive clinical effects tended to show more profound and pervasive abnormalities in TSH response.

We based the selection of our subjects on clinical diagnosis and an independent clinical decision to use ECT. The 3 patients given TRH fall into 2 distinct groups on the basis of both clinical and endocrinological responses. In patient 1 there was a clinical improvement, while in patients 3 and 4 there was none. It is known that both GH and prolactin levels rise in response to stressful stimuli (12, 13), while TSH and prolactin levels are elevated after TRH injection. Two studies of depressed subjects (5, 14) reported an elevation in GH levels after TRH injection. Despite these reports, we attribute the parallel rise of prolactin and GH in patient 1 to the stress of the procedure because the increase *preceded* the TRH injection on 2 of the 3 occasions. In subjects 3 and 4, TSH and prolactin responses after TRH injection paralleled one another and GH elevation was noted after only 1 of 6 injections, indicating that these prolactin responses were produced by TRH. In patient 1 marked GH and prolactin responses were noted with no response to TRH, while in patients 3 and 4 the reverse was true.

There was no overall evidence for a general antidepressant effect. In 1 patient, however, there was a clinical response that could have been a placebo effect. However, it may well be significant that this coexisted with several other features to which both patient and experimenters were blind, namely, no TSH response, marked GH and prolactin venipuncture responses (stress response), and subsequent marked and clear response to ECT after 2 sessions.

On the basis of this, it might be reasonable to hypothesize that TRH may be an effective treatment for a subgroup of depressed patients characterized by severity of illness, abnormal TSH response, accentuated GH and prolactin response to stress, and clinical response to ECT. The question also arises as to whether flattened TSH response to TRH could be characteristic of those depressions which respond well and quickly to ECT; such response is not a completely predictable clinical event. In general, blunted TSH response suggests an abnormality of the hypothalamic pituitary axis in some cases of depression.

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Platelet Monoamine Oxidase Activity in Schizophrenia

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The activity of platelet monoamine oxidase in 12 chronic schizophrenic patients was not significantly different from that in a matched group of normal individuals. The authors emphasize the importance of simultaneous processing of control and patient blood samples and the use of carefully controlled techniques, since relatively minor changes in procedure can markedly influence platelet yield and leucocyte contamination.

THE INITIAL REPORT that mean platelet monoamine oxidase (MAO) activity, assayed with ^{14}C-tryptamine as substrate, was lower in 33 chronic schizophrenic patients than in 22 normal control subjects has sparked considerable interest among clinical researchers and psychiatrists. However, efforts to confirm and further explore that finding have produced a confusing variety of data. Table 1 indicates that published mean values for both normal and schizophrenic individuals vary by a factor or more than 2 and that reported "normal" values have decreased over the years. Carpenter and associates (6) pointed out that platelet MAO was not significantly different from normal in 40 acute and 4 chronic schizophrenic patients, and Nies and associates (3) reported that MAO activity was not significantly lower than normal in chronic schizophrenics when benzylamine was used as the enzyme substrate, although they did see a difference when tryptamine was the substrate. Friedman and associates (4) observed no difference between platelet MAO values for normal and schizophrenic men; their mean value for schizophrenic women was lower than that for normal women, but the difference was not statistically significant. Zeller and associates (8), using tyramine as substrate, reported decreased platelet MAO in both male and female schizophrenics. Cookson and associates (9) reported that in one patient who exhibited a schizophreniform psychosis, platelet MAO activity, with tyramine as substrate, increased 39-fold during 2 weeks of successful therapy with haloperidol. However, they were unable to demonstrate similar changes in other schizophrenic patients. Shaskan and Becker (7) suggested that there may be a biphasic distribution of platelet MAO in both normal and schizophrenic subjects. A bimodal distribution among normal subjects was also observed by Nies and associates (10). In limited studies of autopsy tissue, Nies and associates (3) and Schwartz and associates (11) indicated that MAO is not lower than normal in brains of schizophrenic individuals.

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METHOD

Because of the important implications for diagnosis and therapy, we attempted to confirm the observation of reduced platelet MAO activity in 12 chronic schizophrenic patients, diagnosed by the criteria of Feighner and associates (12), compared with 12 normal individuals (hospital personnel). Mean ages were 39.8 and 37.3 years for the normal and schizophrenic groups, respectively, with 6 men and 6 women in each group. Table 2 presents relevant clinical information on the patients. All showed disrupted interpersonal relationships. None of them was married at the time of admission; 9 of the 12 had never been married. All had extensive hospitalization, with duration of the illness ranging from 4 to 34 years. All were on medication. Although Feighner's criteria were used, these cases also manifested Schneider's first-rank symptoms, such as primary delusions and passivity phenomena. In most cases their employment record was unsatisfactory or nonexistent.

After informed consent had been obtained, blood samples (10 ml) were drawn into plastic syringes that contained 0.2 ml of 10% EDTA at pH 7.4. Control and patient samples were obtained in the hospital at the same time and were kept at ambient temperature for no longer than 2 hours before separation and washing of platelets at 8–10° C by the procedure of Robinson and associates (13). All of the patients were receiving major tranquilizers, but these drugs have been found not to influence MAO values (1). However, since chlorpromazine has been found to weakly inhibit the oxidation of phenethylamine by rabbit brain MAO (14), the influence of that drug is still in doubt. Platelet suspensions were frozen at −20° C immediately after preparation. MAO was assayed with ^{14}C-tryptamine (10^{-4} M, 8.3 mCi/mmol) as substrate in the procedure of Wurt-

TABLE 1
Published Values for Human Platelet MAO with ^{14}C-Tryptamine as Substrate, in nmol/hour per mg

Date	Authors	Normal Subjects			Schizophrenic Subjects		
		N*	Mean	SEM	N*	Mean	SEM
1972	Murphy and Wyatt (1)	22	6.35	0.86	33 (chronic)	2.69	0.4
1973	Wyatt and associates (2)	23	6.4	0.56			
		13**	4.7	0.81	13	3.9	0.64
1974	Nies and associates (3)***	12	3.6	0.4	12	2.6	0.2
1974	Friedman and associates (4)	23	1.91	0.17	26	1.58	0.19
1974	Meltzer and Stahl (5)	15	3.80	0.28	10 (acute)	2.63	0.54
					12 (chronic)	2.04	0.40
1975	Carpenter and associates (6)	131	5.24	0.2	40 (acute)	5.16	0.32
					4 (chronic)	4.94	0.29
1975	Shaskan and Becker (7)†	—	—	—	—	—	—

*Number of samples.
**Nonschizophrenic twins.
***Nies and associates (3) found no difference when benzylamine was used as the MAO substrate instead of tryptamine.
†These researchers obtained values of 1.62±0.34 nmol/hour per mg from a mixed sampling of 13 schizophrenics, 4 alcoholics, and 3 staff members, and 3.09±0.53 nmol/hour per mg from 11 schizophrenics, 4 alcoholics, and 4 staff members.

TABLE 2
Clinical Data for 12 Chronic Schizophrenic Patients

Patient Number	Sex	Age	Marital Status	Number of Years in Hospital	Duration of Illness (years)	Medications (mg/day)
1	F	53	Widowed	>5+	25	Thiothixene HCl (45)
2	F	44	Single	>7+	17	Thioridazine (600) Procyclidine HCl (10)
3	F	36	Single	16	18	Mesoridazine (800)
4	F	54	Single	25	32	Chlorpromazine (1200)
5	F	49	Divorced	>9+	34	Chlorpromazine (400) Trihexyphenidyl HCl (5)
6	M	27	Single	1	4	Chlorpromazine (600) Trifluoperazine HCl (10) Trihexyphenidyl HCl (4)
7	M	38	Divorced	>9+	25	Fluphenazine (25)* Trihexyphenidyl HCl (5)
8	M	39	Single	12	19	Chlorpromazine (1 g) Fluphenazine (37.5)** Trihexyphenidyl HCl (8)
9	M	33	Single	4	14	Trifluoperazine HCl (30) Chlorpromazine (200)
10	M	31	Single	10	13	Chlorpromazine (1600) Trihexyphenidyl HCl (4)
11	M	50	Single	>30	32	Chlorpromazine (200)
12	F	24	Single	3	6	Chlorpromazine (800) Trihexyphenidyl HCl (4)

*Twice weekly.
**Every two weeks.

man and Axelrod (15). All samples were assayed in duplicate. Blank assays for each platelet preparation were performed with a concentration of 2 mM pargyline to block MAO activity. Counts per minute obtained in assays of platelet MAO were corrected by subtracting these blank values.

RESULTS

We found no significant difference in mean platelet MAO activity between chronic schizophrenic and normal individuals. This was the case whether results were expressed as counts per minute of ^{14}C-product, as nanomoles per hour per milligram of protein, or as nanomoles per hour based on milliliters of original whole blood. We preferred the last measurement because of possible variations in leucocyte contamination of platelet extracts and because plasma platelet concentration (i.e., amount of platelet protein) may easily vary by a factor of 2, so that enzyme activities based on milligrams of platelet protein may not accurately reflect the concentration of MAO in an individual's blood. Mean values for platelet MAO (±SE)

were 0.078±0.019 and 0.083±0.027 nmol/hour per ml of whole blood equivalent for normals and schizophrenics, respectively. Since the yield of washed platelets (about 0.5 mg of platelet protein from 10 ml of blood) was probably much less than 100%, these values would not represent the true amine-metabolizing capability of human blood. Mean values based on platelet protein were 2.0±0.8 and 1.8±0.3 nmol/hour per mg for normals and schizophrenics, respectively.

DISCUSSION

During the course of this study it became obvious that experimental values for platelet MAO varied markedly with different methods of extract preparation. With minor changes in procedure, the same sample of blood may produce a platelet extract with a protein concentration that could vary up to a factor of 10, depending on the extent of leucocyte contamination. Most workers express platelet MAO based on milligrams of protein. This may explain the large discrepancies seen in table 1, especially since blood samples were sometimes processed at different locations for the same study. When a different centrifugation procedure (in which the washing of platelets was eliminated) was used, experimental MAO activities, expressed as nanomoles per hour per milliliter of whole blood, were up to two times higher because the yield of platelets was higher. However, when expressed as nanomoles per hour per milligram of protein, the MAO values were 5 times lower because protein concentration in the extracts was greater. This emphasizes the importance of simultaneous processing of control and patient blood samples and the necessity for critical attention to experimental conditions in studies of this nature.

CONCLUSIONS

Although a depressed MAO activity in some schizophrenic patients may be consistent with a possible overactivity of dopaminergic pathways (16) and is very likely influenced by genetic factors (2, 10), the suggestion that an assay of platelet MAO might be used as a laboratory indicator of vulnerability to schizophrenia (2) does not appear justified.

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BRIEF COMMUNICATIONS

Treatment of Requests for Sex-Change Surgery with Psychotherapy

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The authors describe two patients whose requests for sex-change surgery represented crises in sexual identity and anxiety-masking symptoms. Brief psychotherapy enabled these patients to relinquish their belief in a surgical "cure." In evaluating such requests, the psychiatrist should consider the patient's total personality rather than focusing on the genuineness of the perceived gender disorder. Whatever the final decision, the opportunity for continued psychotherapy should be provided.

THERE HAS been keen interest in the problem and treatment of transsexualism since the Christine Jorgensen case in 1953, and sex-reassignment surgery has become an exciting area of surgical innovation. Harry Benjamin's book *The Transsexual Phenomenon* (1) emphasized the improvement in social comfort, self-esteem, and the capacity to relate that many male transsexuals experienced after such surgery. He recommended that selection for surgery be determined by the personal history, the capacity to adapt to a female life-style (usually demonstrated by reaction to hormone therapy, electrolysis, and a one- or two-year trial of living and working as a woman), and psychiatric evaluation. Centers such as those at the University of California, Los Angeles, Johns Hopkins University, and Stanford University were established to provide services to transsexuals, and psychiatrists who had rarely been consulted by patients with such problems had the opportunity to learn about this phenomenon.

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Although surgical treatment for transsexuals was originally greeted with skepticism, Newman and Stoller (2) note that "the pendulum may have swung too far in the other direction." Stoller (3) also pointed out that "The most troubling aspect [of surgical treatment] is that the easier it is to have such procedures done, the more patients request them." Moreover, Baker and Green (4) and Newman and Stoller (2) have cautioned that a wide variety of patients who present as transsexuals may not actually have a deep gender disorder. Benjamin (5) stressed the potential for iatrogenic influence on such requests.

Newman (6) and others have pointed out that there are no reports of clearly defined cases of transsexualism that have been successfully treated by psychotherapy. Although therapy was reported as "helpful" in one case (7), there seems to be general agreement that the true transsexual is rarely available to psychotherapeutic intervention (4, 6). We are concerned that these statements may discourage the practitioner from approaching the initial interview with such patients in a way that could lead to recommending or continuing psychotherapy. The dramatic nature of the request can also divert the physician from his/her usual interest in the whole personality. This is a disservice to the patient. Many patients who request sex-change surgery, such as the two we will describe below, are not true transsexuals and can benefit from conscientious psychotherapy.

CASE REPORTS

Case 1. An 18-year-old woman wrote for an appointment to discuss the possibility of sex reassignment surgery. Her letter stated,

> I have felt like a male all my life. And all my life I have dreamed that I could be changed completely into a male. Up until about six months ago I had no idea that such a change was possible. I guess I don't have to tell you, when

I found out it was possible, it made my whole world a lot clearer, and something to look forward to for the life time of future happiness, to be able to stop pretending I'm something I'm not.

She came to the interview in cowboy attire, short hair, and no makeup. She was tall, gangly, and flat chested. She had always been a tomboy and had friends of both sexes, but her sexual relationships were confined to women (her first sexual experience was with a girlfriend at age 4). She never allowed a female sexual partner to enter her vaginally. She believed she had a fluid emission like an ejaculation at climax, and thought she might have a penis inside her body. Her menstrual periods were always accompanied by severe pain. During her early life, her family had been involved with a fundamentalist religion. She believed God would condemn homosexual relationships and thought that the surgical change would make her sexual life less sinful.

The patient soberly accepted the information that she was mistaken in her belief that a penile prosthesis could be satisfactorily constructed from skin. She elected to continue psychotherapy consultation once a week. Despite a 2½-hour drive to the therapist's office, the patient came to her appointments regularly for 1½ years. The subject of surgical treatment did not come up after the first two visits; her major concern was a homosexual relationship that was on the verge of dissolution. The request for surgery was an attempt to allay this loss and the depression it evoked. The relationship did end, and she weathered the loss and gained self-esteem as a result of her ability to do so.

Her therapy centered around the feelings of disappointment and rage she experienced when she discovered at the age of 4 that her father, whom she idolized, favored her older brother.

In the last 6 months of therapy, an interest in sociology led the patient to enter junior college, where she did creditable work. Her homosexual relationships continued but were less intense, and she was better able to tolerate separation and loss. When last heard from, she had completed her course and was applying for a job in a social work agency as a female.

Case 2. A 19-year-old Catholic male presented himself for psychiatric evaluation, stating that he had always felt like a woman and had wanted a sex change since he was 16. He denied any acute precipitating factors for the request. He had, however, entered a university 2 months earlier. The patient came to the initial interview in women's jeans and a blouse, but he wore no makeup and his gestures were masculine by contemporary standards. He spoke softly and seductively.

He had started cross-dressing before he was 5 years old with the help of his three sisters. He always dressed as a woman on Halloween. He began wearing women's pants and shirts in public at age 16, but he wore dresses, slips, and skirts only to costume parties or in private. His cross-dressing had initially been sexually exciting, but this had not been the case during the past 5 years.

He had dated several girls since the eighth grade and reported oral sexual contact with some of them, but he had never had an erection with a woman. All of his masturbatory fantasies and orgastic experiences were about or with men. He tended to play a female role for physically strong homosexual men; he saw them as "straight" men who looked upon him as a woman. It is important to note that the patient considered his penis a source of pleasure and wanted to be sure that a vagina would suit him. He therefore thought it was a good idea to spend a few months discussing the pros and cons of surgery with a psychiatrist before making an irreversible decision.

The patient participated in individual psychoanalytically oriented outpatient therapy twice a week for 15 weeks. The therapist made no value judgments about the patient's sexual preference and steered the therapy away from the sexual issue per se, inviting the patient to be introspective and to discuss other issues more fully. After several superficial attempts, the patient explored his relationships with his parents, sisters, and friends. He spoke of his femininity as a way to avoid competition with his father and other aggressive men and to rebel against their expectations. He considered men to be physical and women emotional. He saw sexual intercourse as exploitation of men by women and vice versa. He began to consider himself exceedingly superficial and incapable of any deep relationships. In the therapeutic relationship, he was passive and "effeminate" when angry. The patient also dealt with problems of identity, life goals, college and jobs in therapy.

Approximately 10 weeks after therapy began, the patient started to dress in masculine attire and appeared more assertive in his feelings and ideas. By the 13th week, he declared himself a "man"; he decided he was a homosexual and wanted to keep his penis. He did not want to explore his feelings further at this point and terminated treatment 2 weeks later.

DISCUSSION

The male patient we described could have met the diagnostic criteria for transsexualism had he stated that he got no sexual pleasure from his penis or from earlier cross-dressing. Thus, if the patient had been more well-read or known some true transsexuals, his history might have been totally convincing. As Benjamin (5) rightly states, "Many patients know too well what their story has to be in order to get [surgery]." Furthermore, had the therapist been satisfied with a "diagnostic consultation," he might have rejected the request for surgery, but overtly or covertly given clues that would have enabled the patient to present a better story the next time. Even Christine Jorgensen was not sure of her identity until she read a number of medical journals (8). As Benjamin (5) noted, one should be extremely cautious when making a decision about any patient whose true gender identity is in doubt, and a request for sex reassignment should never be rejected outright without offering medical or psychiatric treatment (5).

The first patient might have been harder to diagnose, because the criteria for transsexualism in women are not established. There are some who doubt the existence of female transsexualism as an entity (9); however, this young woman presented a story similar to those of men who are considered transsexual and of women who would be so diagnosed by those who believe there are female transsexuals. Irreparable harm could have been done if either patient had had surgery. Bieber (10) presented a case report of a man who did not fit the currently accepted diagnostic criteria for transsexualism but was given surgery. Two years later

he committed suicide. Benjamin (5) emphasized that there is also a risk of suicide in patients who consider surgery their only answer but do not meet diagnostic criteria and are rejected without being offered alternative treatment. The therapist who is in doubt must remember that time is on his side. A true transsexual will last a year's test living as a member of the opposite sex, but an individual with a shallower cross-sexual identification will not (2).

Stoller (3) has written eloquently about the psychodynamics of true transsexuals. Less has been written on the dynamics of the transsexual symptom. Newman and Stoller (2) reported on four patients who presented as transsexuals: two were fetishistic cross-dressers, one was psychotic, and one was homosexual. The homosexual was in a crisis over the loss of a lover, and one of the fetishists had been left by his wife. In the other two cases, the crisis was not clearly defined. Dellaert and Kunke (11) described the case of a man who had a transsexual crisis upon entering the army. Both of our patients were probably in crisis, one over entering college and the other over the loss of a homosexual partner.

One of us (M.K.) was consulted recently by a 56-year-old man who has been married for 25 years with no history suggestive of gender disorder or variant object choice, sexual role, or social role. For the past 18 months he had had an increasing desire to have "a smooth pubis like a woman's." This desire followed a series of severe personal losses, including loss of his job, which resulted in his wife supporting him. His wife had lost sexual interest in him at a time when she was intensely preoccupied with their son, who had experienced a psychotic break.

We feel very strongly that in the three individuals we have described, the transsexual ideation is a defense against anxiety, not a core gender identity disturbance.

The first two patients had conflict about their homosexual orientation that was exacerbated by new stresses in their lives. The surgical solution was sought to minimize this conflict rather than to treat a gender disorder. While neither of our patients elected to pursue any in-depth investigation of their homosexual feelings, psychotherapy helped them with their crises. We believe that they will seek therapy in future times of anxiety rather than demanding a surgical cure.

We believe it is important to distinguish between the transsexual syndrome for which sex-reassignment surgery may be the only useful therapy and the transsexual symptom that can benefit from psychotherapy. Quick external cures have always been preferred to the slow, uncertain internal growth of psychotherapy. In our experience, the symptom is usually associated with an attempt to avoid the pain of a loss that is experienced as gender-related. A change to the idealized or invulnerable opposite sex is seen as a protection from loss. The therapist can identify the loss and support the patient in facing it.

Many workers (2, 5, 10) have emphasized that the nature of the transsexual request must be evaluated carefully before surgery is recommended. We want to emphasize two additional points. First, dealing with the transsexual request by pursuing questions about sexual and gender identity may convince the patient that the psychiatric consultation is a trial in which surgery must be won. The patient is thus denied an opportunity to develop an introspective attitude toward the consultation. In taking this approach, we may be inadvertently teaching the patient how to present himself or herself as a transsexual and to ignore the rest of his/her personality, denying problems that do not have a surgical solution. Second, the transsexual request should be evaluated not only in terms of the genuineness of the gender disorder but also as a cry for help. It may be the patient's way of manifesting a need for crisis consultation. The clinician can help the patient to identify the crisis and make use of psychotherapy in dealing with it.

The transsexual request is a request for treatment, and psychotherapy should be recommended for the overt or covert anxiety. If the decision has been reached to try a year living and working as the opposite sex preparatory to surgery, psychotherapy during the waiting period is valuable and should be offered.

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Peer Counseling in a General Hospital

BY FREDERICK G. GUGGENHEIM, M.D., AND SUZANNE O'HARA, R.N., M.S.

Self-help groups can aid an individual in coping with and adapting to catastrophic illness. The authors describe a therapeutic technique in which a member of a medical team serves as a catalyst in introducing a "veteran" patient to a newly disabled patient with the same disease or problem so that they can share feelings, experiences, and strategies. Two cases are presented in which patients who were severely depressed benefited from peer counseling. Short-term or "one-shot" encounters can be a valuable way to help some disabled patients deal with the anxiety and helplessness they feel in the acute states of serious disease or injury.

PEER HELP, organized outside the traditional health care framework, has been an important therapeutic modality for several decades (1). Prominent self-help groups include Alcoholics Anonymous (2), Recovery Incorporated (for patients with mental illness) (3), TOPS (for patients with obesity) (4, 5), Ostamates (for patients with colostomies) (6), and Widow-to-Widow (7).

In most general hospitals, patients often help each other on an informal basis—only rarely is such interaction arranged by the hospital care-taking teams. The following cases represent instances in which significant support was given in a planned therapeutic approach that brought together two patients with similar illnesses, one who had recovered from its major effects and the other who was in the initial stages of the illness.

CASE REPORTS

Case 1. Ms. A, a 53-year-old housewife and mother of four, was hit by a truck while touring with her family in a foreign country. She immediately sustained a traumatic above-knee amputation of her left leg and severe crush injury to her right leg. One week later, she was flown to Massachusetts General Hospital for treatment of gangrene that was developing in her right leg. Before the accident, Ms. A was a healthy, outgoing, independent, open person, involved in her community and devoted to her husband and children.

On admission to Massachusetts General, she appeared mildly depressed as she focused on details of her accident. She became seriously depressed over the next two months as multiple medical complications made it increasingly evident that she would lose her remaining leg. Despite active staff support and family encouragement, she became deeply enmeshed in self-pity and bitterness. She experienced sleeplessness, decreased appetite, and apathy. Administration of 150 mg/day of amitriptyline for the next 4 weeks did not produce an appreciable improvement; in fact, her depression increased. The psychiatric nurse clinician suggested peer counseling. Ms. A's physicians were reluctant initially, but the patient's progressive depression, without any other means of effective treatment, prompted them to allow a therapeutic trial.

On another unit there was a 36-year-old married accountant, Mr. B, who had sustained bilateral above-knee amputations 20 years earlier. He used his leg prostheses until an intercurrent illness forced him to use his wheelchair again. After learning from the psychiatric nurse clinician about Ms. A's predicament and needs, Mr. B agreed enthusiastically to the encounter. Ms. A agreed to the meeting.

The psychiatric nurse clinician introduced Ms. A to Mr. B and his wife. All four participants were tense as Ms. A opened the session by asking, "How do you manage to live in a wheelchair?" Mr. B responded by talking about the difficulty of his initial adjustments. He said that he had resented his condition until he began to think, "I'm better off like this than dead. It's all I have. I had better adjust if I want to live normally." He began to boost his own morale and acknowledge the help he received from his family, who were able to treat him as an individual and not a "china doll." Mr. B shared his feelings about encountering embarrassing situations and demonstrated his mobility in and out of the wheelchair.

Both patients related details of their accidents and phases of their adjustment, and genuine closeness evolved through humor and serious talk. The psychiatric nurse clinician helped set the tone of the session and bridged communication gaps. She asked questions when the patient seemed hesitant to discuss certain issues that were important to her, e.g., how to minimize the financial drain and how to diminish social embarrassment.

In concluding the interview, Mr. B addressed Ms. A's discouragement by saying, "You're only as limited as you limit yourself. Naturally, I'd much rather have my own legs than be in a wheelchair but then again I'd rather be rich than poor." Ms. A said she would have to "learn to be an invalid in a wheelchair," and Mr. B quickly replied, "I'm not an invalid! I consider myself handicapped, living a normal life." Later they parted with a feeling of warmth that accompanies a shared, moving experience. Mr. B subsequently said he was grateful to have had this opportunity; he realized how much he had helped Ms. A. On follow-up Ms. A said, "I felt that it was extremely worthwhile to watch him and his wife's acceptance of him and to see him as a well-adjusted person even though he has no legs. I was amazed and would not

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have believed it if you had just told me. But I believe it because I saw him." During her lengthy rehabilitation, she often reflected on Mr. B's successful adaptation and said it increased her motivation to persevere.

Case 2. Mr. C, a hypochondriacal 56-year-old factory worker and physical fitness enthusiast, was hospitalized for infectious polyneuritis. His Guillain-Barré syndrome produced almost total paralysis, and he required assisted respiration for the first two weeks. Concomitantly, his depression increased from mild to severe. He wished for death as a way out of his predicament, but he was fearful of it. He asked repeatedly to be disconnected from the mechanical apparatus so he could die peacefully. As he began to recover, the staff was disconcerted to find that their encouraging comments about his potential for full recovery were greeted with mounting suspicion. He refused to be weaned from the respirator; he would not try to cough or cooperate in other aspects of his pulmonary care. He was convinced that he had a terminal illness because his brother had died recently with paralysis from metastases to the spinal cord.

Because of his rapidly mounting depression and unresponsiveness to staff interaction and psychoactive medication, the team thought that Mr. C might benefit from talking with someone else who had recovered recently from the same disease. The house officers were pessimistic about the usefulness of this procedure because of the depth of Mr. C's depression, but they agreed to have the psychiatric nurse clinician introduce him to a former Guillain-Barré patient. Mr. D, a 36-year-old married tradesman and jogger who had recovered fully from the disease, agreed to talk with the patient. Mr. C thought that such an encounter would be useless, but he did not protest. His wife was eager for the meeting.

The psychiatric nurse clinician summarized Mr. C's principal concerns and background for Mr. D and gave him an informal agenda. In the meeting she acted to facilitate communication, steering Mr. D's conversation away from herself and toward Mr. C, who was able to talk in limited amounts. Mr. D was the most active participant. He reflected on the unbearable length of time it had taken him to communicate, the impatience he and his family had felt as a result of the slowness of his recovery, the loneliness of being unable to express feelings or ideas, and the frequent frustrations and irritability. Mr. D pointed out how staff and family had helped him and mentioned how burdensome it was to realize that rehabilitation is really up to oneself.

Mr. C's immediate crisis was communication, and Mr. D discussed some of the techniques he had used to inform staff of his needs. He had learned to pantomime messages and feelings and to use cards when he could not talk or write. He also told Mr. C that there was no permanent damage from the disease and mentioned his increasing appreciation of life in the postrecovery phase, with the experience of real independence. The former patient told Mr. C that the illness had brought him closer to some friends he had not seen in years and had facilitated a new openness in family relationships. Mr. C and his wife asked questions about personal reactions to various events in the recovery phase, about posthospital financial difficulties that needed to be arranged, and about returning to the job.

At the end of the meeting, Mr. D gave the patient his telephone number and shook his hand. A warm feeling was generated by their sharing of important fears and desires.

There was a drastic change in Mr. C's attitudes and behavior within several hours after the encounter. He became more cooperative with staff during the painful respiratory therapy treatments and his pulmonary function studies showed dramatic improvement. He began to accept more responsibility for his role in his recovery. His depression lessened, although he still had brief episodes of despondency. After 5 months of hospitalization, Mr. C was discharged. He spontaneously emphasized the importance of peer counseling as a primary aid to recovery and offered to act as a "recovered" patient should the need arise. Mr. D was very pleased to have served as a resource person, and the two men have continued their relationship since Mr. C's discharge.

DISCUSSION

The prospects of a disabling or disfiguring illness can fill a patient with dread and despair. We have observed that two particularly troublesome issues for many severely ill patients are fear of the unknown and the absence of any meaningful model for successful adaptation. The timely introduction of a patient who has traveled the rigorous, frightening pathways of disease may do much to facilitate coping, as the two case reports have illustrated.

At this point, several caveats should be mentioned. For a meaningful interaction between a newly disabled patient and a successfully coping "veteran," the staff must consider certain conditions.

1. *Agreement.* The patient must agree, even if half-heartedly, to see someone with his disease.

2. *Timing.* The patient must have moved beyond shock and denial. If he has entered into a state of marked perturbation or repudiation of help, his ability and desire to attend and absorb may be diminished.

3. *The "veteran."* The former patient has to be enthusiastic, articulate, and believable. Similarities in cultural, economic, and educational background as well as age and sex are helpful, although apparently not vital.

Previous clinical experience has indicated that patients whose personalities are dominated by passivity, stoicism, and lack of imagination (8) or who have premorbid extremes of schizoid, paranoid, unstable, or inadequate traits (9) are not good candidates for rehabilitation. The question of whether peer counseling can be effective among such subjects needs further investigation and is beyond the scope of these pilot observations.

The therapeutic task of the newly disabled individual is to contend with and develop some sense of mastery of his disability. Encountering a patient who has coped successfully can help the recently disabled patient to perceive himself as handicapped rather than as an invalid. Peer counseling, in certain instances, has the capacity to cut through overwhelming anxiety and move a patient from hopelessness to motivation and to shift his/her perspective from one of self-pity to self-improvement. As is the case with self-help groups, the emphasis is not on deep psychotherapy, but on faith, will-power, self-control, and day-to-day victories (3).

Traditionally, medical personnel try to reassure the

newly disabled, but their comments are often dismissed as irrelevant. Moreover, staff encouragement of the disabled person to "accept" his illness often falls short of the mark, as is shown in the following statement by a recently blinded woman (10).

> I do not believe that an individual ever accepts blindness. Acceptance implies compliance and approval. However, adaptation to blindness is ongoing because the individual will continually meet unfamiliar situations. . . .
>
> I prefer the concept of "identity integration" to that of acceptance. I describe identity integration as a state of self-actualization in which the individual has learned to live with his disability, to acknowledge his limitations, to involve himself in a world outside of himself, and to return to the fulfillment of life goals. An individual who has achieved identity integration does not deny his feelings and expresses such feelings in constructive ways. Individuals who are self-actualizing, flexible, and spontaneous continue to grow. . . .

CONCLUSIONS

Questions and fears confront the recently disabled person as he faces uncharted pathways. Seemingly mundane but significant concerns can be responded to by the successful "veteran," who serves as a credible role model in the task of adjusting to a new identity.

Although variations of formal psychotherapy do have a place in the management of selected patients on medical-surgical wards (11–15), many times it is best to use a friendly, familiar, here-and-now approach, dealing with reality issues and their interpretation. This paper describes peer counseling as an important technique that, in addition to traditional psychotherapy, hypnosis, drug therapy, and milieu management, can be used in an acute general hospital when staff motivation makes little impact on the patient. It can also be an adjunct to a successful rehabilitation effort.

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The Psychiatric Resident as an Ex-Officio Community Board Member

BY ALLAN BEIGEL, M.D., ROBERT BEVAN, M.D., JOHN LAWALL, M.D., JANET ORTTUNG, M.D., AND DENNIS WESTIN, M.D.

The authors describe a program in which third-year psychiatric residents participate as ex-officio members on the boards of community service agencies. Experience as board members gives residents a broad understanding of issues related to the delivery of community mental helth services and encourages them to continue community involvment after their training is completed.

DURING THE PAST 12 years, training in community psychiatry has emerged as an integral part of all psychiatric residencies. Taking a cue from some of the post-residency programs that began to develop in the early 1960s, training directors have begun to devise mechanisms for exposing a psychiatric resident to the community through direct clinical involvement, most commonly in community mental health centers. In an excellent review article, Pattison (1) outlined the following critical issues: 1) training for practice, 2) integration of training, 3) prerequisite clinical skills, 4) timing of training, 5) types of training experiences, 6) supervision of training, 7) training models, 8) training content, and 9) collaborative training.

At the University of Arizona College of Medicine, involvement of the psychiatric resident in a community mental health center is a part of the second-year clinical experience. Residents are also encouraged during the third-year program, which is largely elective, to involve themselves under supervision in other community settings such as the schools, the courts, the department of welfare, and the department of probation. With this exposure, it is our belief that a resident can later move into the community and begin functioning as a community psychiatrist, if that is his or her choice.

It should be recognized, however, that most residents who are exposed to a community psychiatry experience during training will not choose the primary professional role of a "community psychiatrist." Rather, they will move into one of the other common bases for psychiatric practice such as private practice or hospital-based practice.

Consequently, we became concerned about how a residency training program might prepare those who do not choose community psychiatry for greater community involvement, regardless of their primary mode of practice. We believe that the involvement of only community psychiatrists in the community is not sufficient if psychiatry as a profession is to play a role in the determination of community objectives, goals, and directions in regard to psychiatric and mental health services. Rather, all practicing psychiatrists should be interested, willing, and able to involve themselves in community affairs.

With a view toward achieving this goal, a seminar was developed in the third-year residency program that was designed not only to acquaint psychiatric residents with academic and clinical issues regarding the delivery of community mental health services but also to provide them with an experience as a professional member of the community. It was hoped that the residents would thus gain a greater appreciation of the complex social and political processes involved in the delivery of mental health services and would participate in these processes as informed and interested citizens after completion of training.

THE RESIDENT AS A COMMUNITY BOARD MEMBER

Each resident is asked at the end of the second year to select one agency where he or she will serve as an "ex-officio board member" during the third year of residency. The list of available agencies is drawn from all human service agencies in the community except those in which the resident is currently serving in a clinical capacity and those operated by government agencies. However, residents may select an agency in which they have worked in the past. The resident who does this has a unique opportunity to view mental health service delivery from a dual perspective.

The following agencies in the community have been

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used: 1) a family service agency, 2) a community mental health center, 3) a children's residential and day treatment program, 4) a drug-abuse umbrella agency, and 5) the community services division of the local United Way organization. All are voluntary nonprofit agencies with policy making boards.

Each agency offers the resident a unique experience as an ex-officio board member. The family service agency provides better understanding of the relationship between medically oriented community mental health services, often found in community mental health centers, and nonmedically oriented family services. By comparing these two settings, the ex-officio board member can see the problems associated with integrating different organizational and service models into an effective system. Furthermore, he or she has the opportunity to assess the conflicts that often exist between different professional groups involved in service delivery.

The resident who chooses a community mental health center has an opportunity to participate in discussion about the critical financial problems that are affecting the delivery of services. Involvement in these processes provides a better understanding of how services are influenced by local, state, and federal bureaucracies, with their rules and regulations. Personnel management problems, particularly from the organization director's point of view, are also frequently encountered.

The resident who participates as an ex-officio board member in a children's residential treatment program can assess some of the special difficulties of providing adequate services to a specific target population. Exposure to these problems provides a better understanding of the continuing frustrations that accrue to those residents who attempt to maintain an important, but often underemphasized, service. In an independent children's program, the resident can also observe why quality programs for this age group tend to be so expensive and how service demands must be balanced against priority setting and accountability requirements.

The resident who selects the drug-abuse umbrella agency can explore a wide variety of issues related to the integration of mental health and substance abuse services. This experience allows the resident to come in contact with some of the negative community attitudes toward substance abusers and the pressures these create on board members of drug abuse programs.

Finally, the resident who participates in the United Way process is exposed to a broader perspective regarding the relationship between mental health services and the entire range of health and human services that a United Way umbrella encompasses. The resident and his fellow board members focus on planning issues and what must be done to integrate human services more effectively. This experience may also reveal that mental health services, as important as psychiatrists think they are, may be designated by the community as having a relatively low priority in comparison with other human services.

DISCUSSION

The response of residents who have participated in this experience has been gratifying. Several have shared the information that prior to the program they had little idea of what boards accomplished and only the vaguest suspicion of their range of activities. Others had preconceived notions that those who chose to become involved in boards were prominent people within the community who acted simply as prestigious figureheads. All found, however, that boards, which were most often a combination of professionals and nonprofessionals, were asked to deal with extremely important issues that greatly affect mental health services.

The psychiatric residents also found that they had to redefine their role to adjust to their new status. Previously, while working as clinicians in community mental health settings, their professional role had conferred special status. In a board setting, with many nonprofessionals involved, they found their position less certain and their expertise limited in regard to many of the administrative issues raised. They had to develop constraints on their participation, speaking out only on those issues about which they had expertise, remaining silent in other areas, or shedding their professional garb when they wished to discuss subjects about which they did not have expertise. Those who chose the latter course often had to spend extra time learning the complexities of the agency as well as basic management concepts so that they could communicate with other board members in their "language."

Residents who participated in this experience also came away with a greater respect for the dedication of those people in the community who involve themselves in board operations and a better understanding of what makes a board member effective (2). The potential for a resident's continuing involvement with the community, regardless of the area of practice chosen after training, has been increased. (One resident has already been elected a voting member of his board after the completion of training.)

Although some residents found participation in an ex-officio status frustrating because they had no formal vote, this barrier might prove useful since it may provide the resident with the necessary impetus to obtain voting status through continuing participation after the training experience. This early exposure may also help to counter the tendency of psychiatrists to isolate themselves in their professional practice or to claim that they are "too busy" to participate in community affairs.

Residents also found that didactic material in seminars on administrative and community psychiatry was more relevant as a result of their experiences as ex-officio board members. Discussions regarding the selec-

tion of board members, the relationship between board members and staff (3), the different functions and structures that boards assume, and the relationship between board processes and community social structure were placed in a more meaningful frame of reference as a result of the residents' participation on the boards selected. Furthermore, from the board level the residents were able to gain a better perspective of how mental health services are viewed by the community and how their effectiveness is determined by their relevance to community priorities and attitudes (4).

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The Use of Two-Way TV in Bringing Mental Health Services to the Inner City

BY NORMAN STRAKER, M.D., PATRICIA MOSTYN, M.A., R.N., AND CARTER MARSHALL, M.D.

The authors describe a cable TV link between a medical school and a child health station in East Harlem. Nurse associates and community health workers trained through television conferences with a child psychiatrist have the primary responsibility for patient care at the clinic. Patients and their mothers are evaluated by the child psychiatrist in TV consultations at which nurse associates, health workers, medical students, and child psychiatric fellows are present. Patients and mothers respond positively to the system, and a high percentage of the psychiatrist's treatment recommendations are accepted. The authors suggest that such TV links can increase mental health services to underserved inner-city children.

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IT IS WELL KNOWN that there is a severe shortage of manpower for the delivery of mental health services to children. Although children constitute almost a third of our population, there are only 1,000 child psychiatrists versus 24,000 adult psychiatrists. It is estimated that 2.5–4.5 million children in this country need psychiatric care for emotional problems. In addition, 265,000 children aged 7–17 are seen by the juvenile courts each year on petitions of delinquency or neglect (1). The inadequacy of services for poor and minority children is especially well documented. These children have a higher than normal incidence of serious disorders and often are later referred to child guidance clinics (2–4). Analyses of service utilization data from community mental health centers have indicated that children are underserved in CMHCs (5).

A new method of mental health care delivery for inner-city children, in which a 1.75-mile underground coaxial cable (running along the ducts of the New York City telephone system) links the Mount Sinai School of Medicine with the Wagner Child Health Station in East Harlem, became operational in October 1973. In this paper, we will describe the first two years of this system's operation and discuss its potential for increasing the efficiency of mental health service delivery to high-risk populations where manpower shortages are most acute.

THE WAGNER CHILD HEALTH STATION

The Wagner Child Health Station, a joint program of Mount Sinai Hospital and the New York City Department of Health, serves approximately 1,400 preschool children in health district 17, a triangular area of East Harlem with a predominantly Puerto Rican and black population. The clinic is organized in collaboration with the Department of Community Medicine at the Mount Sinai School of Medicine. Responsibility for primary patient care has gradually been given over to pediatric nurse associates (registered nurses with B.S. degrees who have been trained as pediatric nurse practitioners). The nurse associates were at one time supervised on each case by pediatricians from Mount Sinai, who have gradually removed themselves from the clinic. The nurse associates, who now use treatment protocols and consult with pediatricians via two-way TV when necessary, have become highly autonomous primary care providers. In addition to seeing patients in the clinic, the nurse associates lead a health team that includes three community health workers. These workers have had no formal academic training (most are high school graduates) and are given on-site training by the clinic codirectors, pediatric nurse associates, and pediatricians. Each team alternates a week at the clinic with a week in the community doing outreach work and providing follow-up care.

The mental health component of the clinic was designed to add the psychosocial dimension to the care of each child and his or her family. A psychiatric nurse works at the clinic as part of the health team and serves as liaison to a child psychiatrist at the medical school. The psychiatrist's activities, all conducted using the two-way TV system, have included psychiatric conferences with the nurse associates, training community health workers, psychiatric consultations, and teaching of residents and medical students.

THE PSYCHIATRIC CONFERENCE

A weekly lunch-hour TV conference, during which the child psychiatrist (seated in a studio at the medical school) talks informally to the nurse associates and psychiatric nurse at the clinic, has been the basis of the program. These meetings are informal and vary in content depending on the needs of the nursing staff.

Discussions of problem cases have familiarized the nurse associates with crisis intervention techniques, general principles of child development, and the signs of emotional problems in children. Recommendations by the child psychiatrist are discussed and usually become an integral part of the team's approach to patient care. A frequent topic of the conference is helping the nurse associates decide how best to approach a mother to recommend a television psychiatric consultation. Once the staff's initial resistance to television consultations was overcome by the demonstration of videotaped psychiatric interviews, there was little resistance on the part of the patients. During the period of November 1973 through May 1975, there were 58 staff conferences, which included discussions of 138 problem cases with the child psychiatrist.

Some of the meetings focus on the staff's feelings and resemble a modified form of group therapy. The early meetings reflected the nurse associates' anxieties about assuming the primary responsibility for patient care. Other meetings focused on the frustrations involved in working with families in which there is child abuse, child neglect, parental noncompliance with medical recommendations, and inadequate referral sources. Funding crises, staff departures, and administrative matters are also discussed. It is important to note that a very intense relationship has developed between the nurse associates and the child psychiatrist during these television conferences.

TRAINING OF COMMUNITY HEALTH WORKERS

The child psychiatrist has introduced the community health workers to mental health concepts in two-way TV sessions. Several personal contacts were arranged when the psychiatrist was first hired. These in-person meetings were characterized by suspicion and disinterest on the part of the health workers, who seemed intimidated by the presence of a psychiatrist in contrast to contacts over television. The first TV meeting was designed to clarify the role and functions of a psychiatrist for the health workers. It was arranged after four consultation appointments were not kept so that the health workers could more effectively encourage patients to attend scheduled consultations.

In this meeting, health workers were asked to describe their conceptions of the functions of a psychiatrist. They were shown a videotape of one of their patients being interviewed by the psychiatrist and then were asked about their reactions to the tape. Before they saw the videotape, the health workers perceived the psychiatrist as a judge—someone who confronts people and incarcerates them. They did not see him as concerned or interested in problem solving and thought that only "really crazy" people saw psychiatrists. The videotape dispelled these notions rather dramatically, as was shown in the increased number of patients who attended consultation interviews.

The health workers now attend consultations on their patients unless the patient requests that they not be present. After consultation, they participate in the case planning. They have also asked to have meetings to discuss psychiatric interviews with patients they find difficult.

THE TELEVISION CONSULTATION

A television consultation service of 1 hour a week was started in January 1974, by which time the nurse associates and community health workers had become

advocates of mental health. The TV consultation is a diagnostic interview with an emphasis on early intervention and case planning. During all evaluations, the psychiatrist is in a studio at the medical school and mother and child are with their nurse associate and health worker at the clinic. The nurse or health worker presents the problem before the interview begins. The mother and child are then brought into the room and introduced to the psychiatrist and to any medical students or residents who are observing the interview. The mother is asked if she is willing to have the interview taped for teaching purposes and to allow the students or residents (who are seated off camera) to remain. Only 1 mother has refused the former request; all of them agreed to the latter. The mother and the psychiatrist can see themselves on monitors during the interview. The psychiatric nurse coordinates any referrals for further diagnostic work-up or psychotherapy for the mother or child with Mount Sinai Hospital.

Forty-nine appointments for TV consultations were scheduled between January 1974 and June 1975. All but 2 of these cases were referred by the clinic staff—1 case was referred by an outside agency because the parents refused to talk to a psychiatrist in person but consented to a television interview, and 1 was a self-referral. The proportion of appointments kept (69%) is similar to that of a random sample of consultation appointments at the Mount Sinai Child Psychiatry Clinic (75%). Only 2 of the 15 mothers who did not keep an appointment totally refused to be seen. The others believed their problem had been resolved with the help of the psychiatric nurse or nurse associate, or the problem was situational and resolved spontaneously. Thirty patients were seen in the 34 consultation appointments—19 boys, 10 girls (median age of children=4.1 years), and 1 mother.

The outcome of these evaluations was as follows: resolution of problem as a result of the interview, N=4; further diagnostic study, N=7; recommendation for treatment (for the child or his/her mother or for marital therapy), N=21; and referral to other agencies, N=6 (several interviews resulted in multiple recommendations). Twenty-six of the 30 families involved (86%) accepted the psychiatrist's recommendation and made further appointments. Mothers readily accepted recommendations that they obtain individual therapy, but recommendations for marital therapy were rejected because the husbands would not cooperate. Recommendations for therapy for children were accepted in 66% of the cases. Before the introduction of the TV consultation service, most referrals to the hospital by clinic nurses were refused.

USE OF TELEVISED CONSULTATIONS IN MEDICAL TRAINING

The television consultation service has been integrated into the teaching program of psychiatric residents and fellows in child psychiatry at the Mount Sinai School of Medicine. The fellows, seated off camera, observe the television consultation as part of an orientation course that focuses on interviewing technique, history taking, observation of mother-child interaction, principles of child development, diagnosis, and case management.

After they complete the orientation course, fellows conduct the television consultation interviews while their peers and supervisors observe. Each week a different resident serves as consultant. The interview and videotape are very effective in illustrating interviewing style and pointing out some of the nuances that are often left out of supervision. Child fellows conducted 8 of the 34 interviews from August 1974 through May 1975.

DISCUSSION

This cable-TV link has brought the medical center into contact with preschool children in the inner city. The expertise and facilities of the medical center are now accessible without being intimidating—the children and their families are seen in their own clinic, on their own "turf," with their nurse and health worker present and the psychiatrist and his imagined dangerous powers at a safe distance.

The psychiatrist saves travel time, is able to pursue other interests when patients are unable to keep scheduled appointments, and is at a safe distance from any perceived dangers of the inner city. Linking several child health stations to this system would allow greater utilization of the psychiatrist's time for community walk-in consultations. This arrangement is technically feasible in all major cities that have cable TV.

The use of bidirectional TV has also aided in the development of nurse associates and community health workers to become skilled in case finding and case management. The fact that 28 of 30 cases seen were found within the clinic by the staff contrasts markedly with the usual state of referrals for psychiatry (5) and highlights the efforts of the clinic in early case finding and outreach.

This electronic link has opened the doors of the medical center to patients who would previously have been unable or unwilling to use its facilities. It is our impression that the high degree of acceptance of the psychiatrist's recommendations results from several factors. The patient's first exposure to the psychiatrist occurred in the familiar surroundings of the clinic and was therefore less threatening than an in-person contact at the unfamiliar medical center. In addition, the psychiatric services were well integrated into the clinic services and a good liaison was developed between the clinic staff and hospital personnel.

The psychiatrist's experience with consultation via two-way TV is in agreement with previous reports (6–8). It is difficult to know what, if anything, is lost when contact is by television rather than face-to-face. During the interview, one can observe the nuances of the

child-mother interaction, which are a necessary part of the diagnostic evaluation. The television contacts seem intimate and effective, and all mothers interviewed thus far have responded positively to "being on television." They also seem to gain a sense of heightened self-esteem that is not as noticeable after an in-person consultation. The feeling of being on television and the possible identification with important television and public personalities it may arouse, as well as the gratification of seeing oneself on the monitor, may play a part in this positive reaction.

We cannot make definitive conclusions until more data are collected. However, our experience to date suggests that bidirectional cable TV can be an important new and effective method of mental health care delivery to inner-city children who would often be untreated otherwise.

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LETTERS TO THE EDITOR

On Dangerousness and Involuntary Hospitalization

SIR: In his argument against the dangerousness standard for civil commitment ("The Case for Involuntary Hospitalization of the Mentally Ill," May 1976 issue), Paul Chodoff, M.D., speaks of a dilemma confronting psychiatrists who want to help "their" patients who might not meet this legal criterion. It should not be necessary to point out that standards of commitment have virtually nothing to do with control over the treatment of a psychiatrist's patients. Commitment standards determine solely whether a private citizen will become a patient against his will.

Just as a citizen with a heart condition is not subject to compulsory treatment at the hands of altruistic state-employed cardiologists, a citizen suffering from mental illness does not automatically qualify as an involuntary patient of state-employed psychiatrists who are eager to act in his best interests. Among medical doctors, only the community of psychiatrists lobbies for an expanded captive clientele. All other doctors treat those who come for aid and let the rest choose for themselves.

If a rigorous standard of dangerousness is applied to the legal process that turns a citizen into an involuntary patient, it is indeed likely that mental hospitals housing only such patients will, as Dr. Chodoff states, contain "a small population of volatile, highly assaultive, and untreatable patients" (assuming that Dr. Chodoff is not applying all three labels to all who become committed patients under the dangerousness standard). If such is the result, society would benefit from having the community of state-employed psychiatrists focus its treatment efforts on those who are found to be seriously disruptive of society by reason of mental illness. An individual could become "their" patient either by the traditional method of consulting a physician or by the legal process wherein dangerousness as a result of mental illness is found by a court or a jury of peers.

Firmly rooted democratic principles and the inexact nature of the psychiatric art militate against paternalistic and subjective commitment criteria. This is underscored by the grim fact that many of the public facilities in which captive patients will be held and "treated" are professionally unaccredited. For example, in Washington, D.C., where Dr. Chodoff practices, there are currently no accredited public facilities for involuntary patients.

HARRY J. FULTON, ESQ.
Washington, D.C.

SIR: Dr. Chodoff is on target when he points out that dangerousness as the sole criterion for involuntary hospitalization is a trap for psychiatry. However, he shows an ignorance of constitutional law when he states that "involuntary commitment on these grounds becomes a form of preventive detention and makes the psychiatrist a kind of glorified policeman." Dr. Chodoff should know that no policeman in this country has the right to detain anyone in order to prevent the commission of a crime or dangerous act. Of course, preventive detention is standard operating procedure in totalitarian countries. Thus a psychiatrist practicing preventive detention is not merely augmenting the duly constituted police power of the state but actually subverting constitutional guarantees.

Dr. Chodoff is much less convincing in his defense of involuntary hospitalization on the grounds that an individual is mentally ill, in need of treatment, and lacking the judgment to know what is in his/her best interests. Just because physicians have been reminded of the need for safeguards by the current stringent requirements for involuntary hospitalization in some states, there is little reason to believe that if the requirements were made less strict (as Dr. Chodoff feels they should be) "chastened" psychiatrists would refrain from abusing their power. The elementary historical fact is that discretionary power leads inevitably to abuses of that power. The criminal justice system has recognized this fact and is in the process of reducing judicial discretion in sentencing, probation, and parole. The recently disclosed abuses of power by the FBI and CIA should have taught us the dangers of police powers that are not subject to the usual consititutional protections. Parens patriae requires the bestowing of wide, poorly defined, discretionary powers on physicians, who although they may mean well, will in time abuse these powers.

IRWIN N. HASSENFELD, M.D.
Albany, N.Y.

Dr. Chodoff Replies

SIR: I am pleased that Dr. Hassenfeld has placed himself in the ranks of those psychiatrists who are coming to see that dangerousness as a sole criterion for involuntary hospitalization becomes a trap for psychiatry. He is not entirely correct when he states that preventive detention does not exist in legal form in the United States. In fact, there is a preventive detention statute in the District of Columbia, although it has not yet been invoked, and I have been told that a similar statute also exists in Alaska. However, I want to make it clear that I am not an advocate of preventive detention. I agree that under any circumstances it is a practice of exceedingly questionable legal and ethical validity and that its acceptance constitutes a step toward a totalitarian state. It is for this reason that I point out the untenable position psychiatrists find themselves in when the constraints of the dangerousness criterion force them into the role of agents of preventive detention in order to bring about involuntary psychiatric hospitalization.

The other point made by Dr. Hassenfeld is the same as that put forth in Mr. Fulton's letter, that psychiatrists cannot be trusted to make medical judgments that would have the effect of depriving the patient of his liberty against his will. Both writers feel that the abuses which occur when psychiatrists are invested with this power are intolerable. In my paper, I acknowledged that abuses may occur. However, they

are unlikely to have much currency if the patient is protected by judicial review, legal representation, the right of appeal to a jury, and the abolishment of indeterminate commitment, all of which I advocate.

What Dr. Hassenfeld and Mr. Fulton fail to consider are the abuses, injustices, and wrongs that can and do take place when sick people desperately requiring treatment and unable to exert their judgment to seek or accept it are prevented from getting such treatment simply because they are not "dangerous." It may be that patients need to be protected not only against "the community of psychiatrists lobbying for an expanded captive clientele" but also against those who may be using liberty as a rallying cry that conceals equally grave and possibly more irreparable abuses.

Finally, I regret the tone of Mr. Fulton's letter. The subject discussed in my paper is not appropriately dealt with in a polemical manner. It should be discussed with goodwill and with a recognition that it is not susceptible of simplistic solutions. Mr. Fulton appears to want to place it in the domain of drama—the struggle of a right that he espouses against a wrong promulgated by certain psychiatrists. However, the question of when to hospitalize people against their will to try to restore them to health or save their lives is not drama; it is more akin to Greek tragedy—the conflict of one right against another right.

PAUL CHODOFF, M.D.
Washington, D.C.

Somnambulism and Bedtime Medication

SIR: I was interested in "Pavor Nocturnus: A Complication of Single Daily Tricyclic or Neuroleptic Dosage" by Abraham Flemenbaum, M.D. (May 1976 issue) because I have long been impressed by the fact that patients taking neuroleptics, antidepressants, and even antihistamines at bedtime often complain of "dreaming too much" and frequently report frightening dreams. I was particularly interested in Dr. Flemenbaum's observation that one of the patients he described had had an episode of somnambulism for the first time in her life while taking a single bedtime dose of medication. Some years ago I observed within one year four cases of somnambulism apparently precipitated by bedtime medication.

The four women were outpatients ranging in age from 29 to 54. Some of the patients were taking neuroleptics during the day; at bedtime they received either a higher dose of neuroleptics or hypnotics. The neuroleptics were chlorprothixene, perphenazine, and thioridazine. The hypnotics were methaqualone alone (one patient) and a compound containing methaqualone and diphenhydramine hydrochloride (two patients). One of the patients who was taking the combination drug was also taking a compound containing amylobarbitone sodium and quinalbarbitone sodium. The fourth patient was taking chlorprothixene at bedtime. The episodes of somnambulism were typical, with sleepwalking and other activities followed by amnesia. In one patient (a 49-year-old woman with chronic anxiety), sleepwalking occurred three times and she woke up during each episode. During one episode, her husband stopped her when she was opening the door. At that moment, she woke up and then remembered that she had dreamed the door bell was ringing.

The episodes of somnambulism disappeared when the hypnotics containing methaqualone were discontinued or the bedtime dose of chlorprothixene was reduced. Follow-up ranged from 2 months to 1 year, with no recurrence of somnambulism.

I suspect that there may exist more unreported cases of sleep disorders related to bedtime medication. Studies like the one by Dr. Flemenbaum may help to indicate whether this phenomenon is more common than we have thought.

LUIS HUAPAYA, M.D.
Montreal, Que., Canada

In Defense of the Boards

SIR: Having been involved in teaching psychiatry to medical students, I detected some similarities between the noble attempts made by my students to justify inadequate performance in the classroom and some of the issues raised by Martin R. Lipp, M.D., in "Experiences of Psychiatry Board Exam Casualties: A Survey Report" (March 1976 issue).

By way of an anecdote, on one occasion a fourth-year medical student was unable to discuss a basic concept in psychiatry. After much hemming and hawing, another student came to his rescue and said, to my amazement, "He's not very verbal." These words came back to me as I read Dr. Lipp's attempts to gloss over the importance of oral examinations in psychiatry.

Dr. Lipp has not paid attention to the fact that many people do pass the Boards. The essential difference in outcome may have much to do with preparation. The article makes much of the high failure rate in the examination. However, as shown in the *Journal of the American Medical Association* State Board Numbers, high failure rates were customary for years in state licensure exams. Since all of the "casualties" had licenses, it would have been interesting to see how they compared the two exams.

It would be unfortunate to encourage "grade inflation" in the qualifying professional exams. The universities now have the problem of sorting out essentially meaningless numerical hyperboles that used to have some significance. Let us spare our patients the trouble of turning to Ralph Nader to find out who is qualified in psychiatry!

ALAN E. RAINESS, M.D.
Silver Spring, Md.

Dr. Lipp Responds

SIR: Dr. Rainess emphasizes the importance of preparation for passing oral Board exams. I agree with him. However, there is a kind of predicate logic here that needs to be identified. Just because knowledge and rigorous preparation are useful in taking the Boards does not mean that the Boards therefore provide an accurate means of assessing these qualities. Oral exams are complex social situations in which the personalities and situation-specific behavior of candidate, patient, and examiner may play as great a role as knowledge.

In fact, all candidates taking the orals have already demonstrated that they have an acceptable fund of current knowledge, as measured by the written exams, which are a prerequisite for taking the orals. One cannot say the same thing for the examiners, who may not have been required to formally document the accuracy and breadth of their knowledge for decades.

The important point is that the exams simply have no de-

monstrable reliability and validity in terms of identifying clinical competence. I challenge Dr. Rainess, or anyone, to provide evidence to the contrary. Anecdotes can be amusing, but they provide a slippery foundation for public policy.

In the absence of such evidence, we must recognize that we are subjecting our colleagues and ourselves to what is little more than a hazing process—a harmless rite of passage for those who are successful, but a cruel gauntlet for those who are not.

Is an examination process that is of no proven relevance to excellence of patient care worth the brutal costs to our profession? And worth it to whom?

I think the onus is on the American Board of Psychiatry and Neurology to demonstrate the meaningfulness of its procedures or find a new means of certifying professional competence.

MARTIN R. LIPP, M.D.
San Francisco, Calif.

Lithium in Schizophrenia

SIR: I would like to comment on "A Placebo-Controlled Study of Lithium Combined with Neuroleptics in Chronic Schizophrenic Patients" by Joyce G. Small, M.D., and associates (December 1975 issue). During the past year, I have treated four chronic schizophrenic patients who had not responded favorably to neuroleptics with a combined neuroleptic and lithium therapy. I have found a varying degree of success; all patients are doing better and their symptoms are better controlled on this regime than they were by neuroleptics alone. I feel, as do Dr. Small and associates, that lithium may have a definite place in the treatment of chronic schizophrenics who do not respond well to neuroleptics alone. There is a need for further investigation in this area.

A. TAHERI, M.D.
Ellicott City, Md.

In Defense of a Second Edition

SIR: I have never complained about a book review, but I do take exception to Dr. Benjamin J. Sadock's review of the second edition of *The Theory and Practice of Group Psychotherapy* by Irvin D. Yalom (May 1976 issue). I reread my own review of the book and began to wonder whether Dr. Sadock and I had read the same volume. My report read,

> Dr. Yalom has written a minor masterpiece. He creates clarity with plain, simple English. At the same time he seems to have included every significant article in the bibliography and every point of view in the text. Usually a writer has to sacrifice either detail or clarity. Yalom manages to sacrifice neither. Most importantly—at least to this reader—was the author's careful separation of clinical opinion, his own and others', from marginally substantiated and reasonably substantial experimental data. This careful separation of opinion from established or moderately established experimental data is refreshing and rare.

While any book can be improved, Dr. Yalom's work is the most complete review of the theory and practice of group psychotherapy published to date. The only way I can account for the negative review is that Dr. Yalom may have stepped on some sensitive psychoanalytic toes. In all fairness, are psychoanalysts any less apt to express their "personal views" and then mistake their ideas for facts?

FRANK KLINE, M.D.
Los Angeles, Calif.

SIR: It seems to me that Dr. Sadock was an unfortunate choice to review the second edition of Dr. Yalom's book on group therapy because he has recently edited a book on group psychotherapy himself. While he is an eminent and knowledgeable authority and undoubtedly did his utmost to be objective, I question whether and to what extent this is possible. It seems to me that in the interests of objectivity and the appearance of objectivity, book reviewers should not have participated in competing works. Since the Editor of the *Journal* cannot be expected to keep track of the authors of all books, the letter that is sent to potential reviewers should request them to disqualify themselves if they have written or are preparing a competing book.

HENRY GRUNEBAUM, M.D.
Boston, Mass.

Questioning a Diagnosis

SIR: The article "Mania and Bromism: A Case Report and a Look to the Future" by A. Joseph Sayed, M.D. (February 1976 issue) raises a number of questions. First, the initial serum bromide level (32.5 mg/100 ml), while elevated, is well below the generally accepted lower limits of toxicity. "Bromide intoxication should be considered as a possible cause of any unexplained mental or neurological symptoms occurring when the serum bromide level exceeds 9 mEq per liter (72 mg/100 ml)" (1). This suggests that bromism is a coincidental rather than a causal finding.

Next, given a biologic half-life of 12 days (2), it is surprising that "a serum specimen drawn 6 days later was negative for bromide." The article did not mention any efforts to hasten the elimination of bromide, and in the absence of such measures one must question either the initial or 6-day value.

The source of the bromide remained obscure, but the author speculated that a bromide-containing antacid was the culprit. I am not aware—nor is the Drug Information Center at the University of Wisconsin-Madison Center for Health Sciences—of a bromide-containing antacid, but if such a preparation is available, it represents a potential hazard and deserves identification.

While it is difficult to disagree with the author's conclusion that manic behavior may occur secondary to bromism, I find little substance in the case report to justify this conclusion. The even more ethereal suggestion that bromide may be linked in a significant way to manic-depressive illness is an interesting speculation but, again, is not supported by the case described.

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JAMES W. JEFFERSON, M.D.
Madison, Wis.

SIR: I noted that the serum bromide level of the patient Dr. Sayed described was 32.5 mg/ml and that the author considered this toxic and stated "normal=less than 1.5 mg/100 ml." I hope that this was a typographical error, as the toxic level of bromide is much higher than that indicated by the author.

MAHMOUD ABBAS, M.D.
Baltimore, Md.

Dr. Sayed Replies

SIR: Dr. Jefferson made three points in his letter. As the first is similar to that made by Dr. Abbas, I will address it later. Concerning the second point, I have no explanation for the rapid drop in the patient's bromide level. There was no attempt to lower the level.

Dr. Jefferson's third point is important. The bromide-containing antacid I referred to is Bromo-Seltzer (Warner-Lambert). The company had removed the bromide salt from the product by August 1973; the patient was hospitalized in September of 1974. I thought it was possible that the product might still be on the shelves in some stores, or it could have been purchased previously. At the present time, the availability of bromide-containing Bromo-Seltzer is negligible, but bromide is still available in many other compounds. For this reason, I felt the case report would be important in future considerations of both patient evaluation and research in affective illnesses.

In response to Dr. Abbas, the bromide level printed in my article is correct. However, Dr. Abbas has not summarized my conclusions correctly. What I said was, "The patient described here exhibited classical features of mania but did not show signs of bromide intoxication or delirium, although his serum bromide level was abnormally high." The purpose of the case report was to describe a patient who showed no evidence of neurological toxicity but did have an abnormal change in mental functioning that has not been previously reported in association with bromide ingestion. In fact, the bromide level was not in the toxic range, but was elevated considerably above the normal range.

A. JOSEPH SAYED, M.D.
Cincinnati, Ohio

Two Problem-Oriented Letters

SIR: I read with interest "The Use of Problem-Oriented Medical Records in Community Mental Health Centers" by Garry M. Vickar, M.D., and Marijan Herjanic, M.D. (March 1976 issue). I am a member of a subcommittee of the Department of Psychiatry at Thistletown Regional Center for Children, Rexdale, Ontario, which examined the use of a problem-oriented, goal-oriented record (POR-GOR). We found several problems that I would like to describe, along with possible solutions.

1. Quality of patient care—there is a lack of evidence that the POR-GOR improves the quality of care. In order to determine this, it would be necessary to do a comparative study of treatment outcome using traditional and problem-oriented approaches.

2. Defining the data base. The emphasis seems to be on collecting the minimum amount of information necessary to formulate problems, which could exclude normative or negative information and lead to an insufficient data base. Clear standards should be set for the services of a center and the emphasis should be on gaining the maximum possible information rather than the minimum necessary.

3. Diagnosis and formulation. This information should be included in every record. There tends to be an emphasis on formulation of problems rather than a holistic view of the case. This may have implications for treatment and training.

4. Problem definition. Guidelines should be established for each service area. There should be input from several disciplines in order to avoid a lengthy and perhaps piecemeal treatment approach.

5. Implementation. If problem-oriented systems are to be used, extensive discussion and education are necessary to avoid mere substitution of one ritual for another.

6. Deficiencies in the traditional psychiatric record. A clinical records committee should label the deficiencies of the traditional system; this would provide a basis for discussion and facilitate acceptance of the change to a problem-oriented format.

7. Progress notes. One needs to refer constantly to the problems list. This requires the full record for one to write the progress note. An alternative to referring to problems other than by numbers needs to be devised.

In conclusion, I would like to say that a problem/goal-oriented record system should not be introduced in haste at any center until these difficulties can be resolved.

P.K. JOHN, M.D.
Rexdale, Ont., Canada

SIR: I was very pleased to see the article by Edward H. Liston, M.D., on "Use of the Problem-Oriented Medical Record in Psychiatry: A Survey of University-Based Residency Training Programs" (June 1976 issue). Although the data were collected in November 1974, I think it is still very important that psychiatrists see the degree of acceptance of the problem-oriented system at that time. Despite the acceptance and what I suspect is increased utilization of the problem-oriented system in psychiatry since November 1974, I believe it is important that a healthy skepticism about utility lead to more study and research on the system. The APA Task Force on Problem-Oriented Systems will soon report its belief that current knowledge about the problem-oriented system is insufficient to warrant recommending its widespread utilization or the mandating of the system for such purposes as third-party reimbursement, peer review, audit, or other accountability studies.

The point raised by Dr. Liston concerning the importance of continuing education, audit, and correctional feedback in order to be satisfied with implementation of the problem-oriented system is a very important one. Currently, Fort Logan Mental Health Center is implementing the problem-oriented system and has a comprehensive plan both for the initial stages and continuing emphasis on the system.

The criticism that the system seems less relevant or applicable to psychoanalytic approaches to treatment is one that is widespread. In almost all cases my experience suggests that those who make this criticism have no essential grasp of the problem-oriented system. Useful criticism, like useful

teaching, can best be done from a position of experience. In the Department of Psychiatry at the University of Colorado, we are attempting to find applicability of the problem-oriented system within a psychoanalytic framework. Early efforts seem encouraging, especially those from the outpatient clinic under the direction of Dr. George Mizner. We hope to report these efforts in the near future.

RICHARD L. GRANT, M.D.
Denver, Colo.



BOOK REVIEWS

The Foundations of Psychiatry. American Handbook of Psychiatry, 2nd ed., Vol. I, *edited by Silvano Arieti; Silvano Arieti, editor-in-chief. New York, N.Y., Basic Books, 1974, 1,215 pp., $29.50.*

Child and Adolescent Psychiatry, Sociocultural and Community Psychiatry. American Handbook of Psychiatry, 2nd ed., Vol. II, *edited by Gerald Caplan; Silvano Arieti, editor-in-chief. New York, N.Y., Basic Books, 1974, 836 pp., $24.50.*

Adult Clinical Psychiatry. American Handbook of Psychiatry, 2nd ed., Vol. III, *edited by Silvano Arieti and Eugene B. Brody; Silvano Arieti, editor-in-chief. New York, N.Y., Basic Books, 1974, 860 pp., $24.50.*

Organic Disorders and Psychosomatic Medicine. American Handbook of Psychiatry, 2nd ed., Vol. IV, *edited by Morton F. Reiser; Silvano Arieti, editor-in-chief. New York, N.Y., Basic Books, 1975, 922 pp., $32.50.*

Treatment. American Handbook of Psychiatry, 2nd ed., Vol. V, *edited by Daniel X. Freedman and Jarl E. Dyrud; Silvano Arieti, editor-in-chief. New York, N.Y., Basic Books, 1975, 954 pp., $32.50.*

New Psychiatric Frontiers. American Handbook of Psychiatry, 2nd ed., Vol. VI, *edited by David A. Hamburg and H. Keith H. Brodie; Silvano Arieti, editor-in-chief. New York, N.Y., Basic Books, 1975, 1,022 pp., $32.50.*

How does one go about reviewing an encyclopedic offering of six volumes that practically cover the whole of modern psychiatry, with a history of the discipline and some prognostications for the future included for good measure? The answer is, of course, one cannot; yet it must be done, even though the effort be clumsy, because the task is before us and the time for the appearance of the full set of these volumes is propitious.

Despite all of the pressures and hazards of psychiatric practice today and despite the idle croaking of the batrachians about us, the profession is growing at an accelerated pace and is being enriched by the contributions of various scientific disciplines. Having gone through its growing pains, the specialty of psychiatry is taking its place with its sister medical disciplines; however, to tell the truth, no medical discipline is having an easy time of it these days.

The six volumes of Dr. Arieti's *Handbook* are testimony to psychiatry's accomplishments, to the skill of the editor-in-chief, and to the faith and cooperation of his colleagues and his publisher. Assembling all of this material was in itself a prodigious task; Arieti was fortunate in the selection of both his authors and his fellow editors. Because it is almost impossible to do justice to this work in a journal review, I will say only a word or two about each volume and trust the wisdom of potential readers for the rest.

In general the presentations seem to be inclusive and of a high order. The authors of most of the presentations will be recognized as authorities. Some of the younger authors hold promise for the future. All in all it is probably the most comprehensive effort yet to appear in the literature of modern psychiatry; undoubtedly it will be used as a reference work by clinicians, teachers, researchers, and students in various fields for a long time to come.

The first volume assesses the basic ideas of the psychiatric disciplines. Genetics, the family, and personality are all considered, as are the concepts of normality and maturity. In addition, there are excellent discussions of the life cycle and the various psychiatric schools of thought as well as contributions from related fields. Psychiatric nomenclature is also outlined in this volume.

The second volume covers child and adolescent psychiatry as well as sociocultural and community psychiatry. The names Lourie, Ackerman, Goldfarb, Eisenberg, Anthony, and Raquel Cohen give evidence of the high quality one can expect in these articles. A discussion of the federal government's organization for human services and its implications for health planning is offered by the knowledgeable authors Brown and Isbister. All of this is informative, and much of it hints at what the future holds.

The third volume is concerned with adult clinical psychiatry, focusing on specific neurotic and character disordered behavior and syndromes associated with action directed against the environment. Here again the names of the contributors are impressive, and all of the various psychological deviations are discussed. Addictive behavior, drug addictions, and the use of psychotomimetic and related consciousness-altering drugs come in for their share of attention, as do functional psychoses.

The fourth volume contains some excellent discussions by top-notch observers, e.g., among others, Stunkard on obesity, Hilde Bruch on anorexia nervosa, and Jack Mendelson and Nancy Mello on alcoholism.

The fifth volume is concerned with treatment. After an excellent introduction by the editors, Jerome Frank discusses the psychosocial therapies, and Blos and Finch consider psychotherapy in children. Somatic therapies, management and care of patients, various aspects of legal medicine, and a consideration of psychiatry for the 1970s are all given their due; the latest information about each of these areas is presented.

The sixth volume includes sections titled Basic Approaches to the Understanding of Human Behavior, The Development of Behavior Frontiers, Psychopharmacology, New Directions in Treatment and Care, and The Social Context of Psychiatry.

As already noted, one cannot do justice to this encyclopedia in a review; in fact, one feels like a child in a candy store—he doesn't quite know what to select because he really wants it all. It is obvious that there are seeds for a lifetime of study in these volumes. They belong on every library shelf as well as in the libraries of those physicians who can see their way clear to obtain them. The work is comprehensive, authoritative, and, in general, excellent.

F.J.B.

A Prince of Our Disorder: The Life of T.E. Lawrence, *by John E. Mack. Boston, Mass., Little, Brown and Co., 1976, 537 pp., $15.00.*

Written by one of the most capable psychiatrists in the Boston area, this book is an extraordinary accomplishment. It is both a biography of T.E. Lawrence and a thorough analysis of the uncommon series of personal tragedies experienced by the subject, who became famous in large part because of Lowell Thomas' dramatic reporting of his involvement in Middle East affairs during and after World War I. Anyone who reads and studies Lawrence's *Seven Pillars of Wisdom* (1) and this biography and character analysis will know almost as much about Lawrence as anyone needs to know, but the task requires keen attention.

The author worked on this book for many years; he consulted with an extraordinarily large group of persons in this country and abroad who have shared his interest in Lawrence. Not only has he done extensive research of all of the published material relating to his subject, he has interviewed at length dozens of persons who knew Lawrence personally. Not surprisingly, Lawrence's psychological constitution receives very intensive study. The result is a character analysis of such depth and accuracy that it will seldom be challenged.

This book is strongly recommended to anyone interested in Lawrence as well as to all who are fascinated by accounts of how serious personal handicaps can be transformed into constructive action.

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DANA L. FARNSWORTH, M.D.
Boston, Mass.

Schizophrenia: A Multinational Study. A Summary of the Initial Evaluation Phase of the International Pilot Study of Schizophrenia. Public Health Papers 63, *by the World Health Organization. Geneva, Switzerland, WHO (New York, N.Y., Q Corp., distributor), 1975, 150 pp., 56 Swiss francs (paper).*

Under the auspices of the World Health Organization, a group of experts met in 1959 to review the existing data on the epidemiology of mental disorders. They concluded that there was considerable need for reliable and valid data on the incidence and prevalence rates of these conditions. Over a period of years and with a series of consultations the international pilot study of schizophrenia (IPSS) gradually emerged. It set as a very high priority the goal of carrying out epidemiological research in a cross-cultural setting. In 1966 the formal study began. It resulted in a report that was published in 1974 (1). Because that 427-page publication achieved only limited visibility, it is a pleasure to welcome *Schizophrenia: A Multinational Study*, an authorized abridged version that will be readily available to the public as an individual number in the *Public Health Papers* series.

The obstacles presented to the research team were indeed formidable. The study was conducted in nine countries and involved over 1,200 patients. Because nine countries reflected very different scientific and cultural traditions, it was a very difficult task to create circumstances in which the researchers could collaborate on, let alone conduct, the project. One of the potentially richest products of the IPSS is the development of functional collaborative relationships.

The project exerted a great deal of effort in the development of clinically reliable research instruments. These instruments were developed and applied across the nine cultures involved in the study. It is a very important finding that schizophrenia can be reliably identified despite striking cultural differences. Obviously, cross-cultural reliability does not address the question of validity; nevertheless, it does refute the often stated claims that the diagnosis of schizophrenia cannot be made reliably and that it is not stable in the face of cultural differences.

Perhaps the most important finding of the IPSS is the demonstration that schizophrenia in the nine countries is essentially similar. Patients could be identified in each culture who were indistinguishable from one another. This finding obviously does not address the issue of the universality of schizophrenia, but it does a great deal to demonstrate the basic similarity of the syndrome in the cultures studied.

This small pamphlet summarizes succinctly the essential findings of the international pilot study of schizophrenia. It is of general interest to the practicing clinician because of its emphasis on such practical problems as diagnosis. This abbreviated version of the initial report presents the basic results, but it would be wiser, in my judgment, for the schizophrenia specialist to read the more complete edition.

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1. World Health Organization: The International Pilot Study of Schizophrenia, vol 1. Geneva, WHO, 1974

ROBERT CANCRO, M.D.
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Current Psychiatric Therapies, Vol. 15—1975, *edited by Jules H. Masserman, M.D. New York, NY, Grune & Stratton (Harcourt Brace Jovanovich), 1975, 300 pp., $25.00.*

This most recent edition of a deservedly popular series is highly practical and less discursive than some of the previous editions have been. The philosophical presentation is confined to the scholarly and—finally—optimistic presidential address presented by the editor to the Fifth International Congress of Social Psychiatry, which appears in this volume as the leadoff article. It may be worth noting that Dr. Masserman's preoccupation with Ur-needs and Ur-essentials has flowered into hopeful attention to man's Ur-aspirations.

The remainder of the book follows the usual format—division into sections devoted to Child and Adolescent, Adult Psychotherapies, Psychophysiologic Therapies, Family and Group Therapies, Crisis and Community Therapy, and Institutional Therapies. In each there are attempts to reevaluate or suitably modify traditional therapies or to find new therapies or new uses for older ones, and almost without exception there are practical notes in each article that should be invaluable to students and practitioners.

Obviously, it would be impossible to do much more than list the 36 articles that have been contributed to this book; however, without attempting to make any judgments except those based on my own interests, a few comments might be in order. For example, it is refreshing to have a report on a clinic for hippies in Sudbury, Northern Ontario, that winds up with a rather sorrowful statement amounting to, "It sim-

ply didn't work." Perhaps we should have more frank statements about our failures in such enterprises.

In an article on psychiatric treatment modalities in burn patients, Jorgensen and Brophy express appropriate concern over the staff/patient conflicts that arise around the issue of the dangers of "excessive narcotics." Because freedom from pain is usually a treatment modality that is always available, it is sad that in their attempt to guard their patients against excesses, doctors and nurses inadvertently may produce unnecessary apprehension or even discomfort. The reason given for their vigilance by medical personnel is that there is always the possibility of iatrogenic addiction, but I wonder how often this actually occurs.

The final two sections of this book are devoted to Crisis and Community Therapy and Institutional Therapies. These contain some interesting suggestions for making better use of certain treatment modalities within institutions and various community-oriented programs outside institutions in order to facilitate the "dehospitalization" of patients. It is perhaps fitting that Barton's paper on this topic is the closing one in the book.

In summary, this volume offers in condensed form a very down-to-earth exposition of many of the present-day modalities and some interesting and, one hopes, useful innovations. The material is well organized and instructive.

C.H. HARDIN BRANCH, M.D.
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Freud: The Fusion of Science and Humanism. The Intellectual History of Psychoanalysis. Psychological Issues Monograph 34/35, *edited by John E. Gedo and George H. Pollock. New York, N.Y., International Universities Press, 1976, 438 pp., $12.50 (paper).*

The intention of this collection of 16 papers is to review the intellectual history of psychoanalysis and to reemphasize Freud's aim of understanding man's inner life through his view of humanist introspection. Fifteen of these papers have been published elsewhere in various psychoanalytic periodicals. They are all the work of members of the Chicago Psychoanalytic Institute.

The papers are divided into five groups: Background, Precursors, The Creation of Psychoanalysis, Freud's Mature Working Methods, and Freud and the Psychoanalytic Community.

The first group depicts the history of introspective psychology from its inception during the Renaissance through its relegation to humanist philosophy as science became more materialistic. The papers in this group also show the cultural patterns of the nineteenth century in which Freud grew as well as examining the written productions of Freud's adolescence.

The second group, Precursors, recounts the antecedent work of Charcot and Josef Breuer as well as the case of Anna O, Breuer's patient with whom the cathartic method of psychotherapy began.

The third group, The Creation of Psychoanalysis, delineates the difference in creative techniques in psychoanalysis between those of Breuer and Freud. With his mixture of scientific caution and public candor, Freud finally alienated himself from the medical community and returned to his introspective methods.

The fourth group, Freud's Mature Working Methods, describes Freud's formation and subsequent modification of several of the psychoanalytic hypotheses leading to the hypothesis of the universality of the Oedipus conflict. The authors show the progress of Freud's thought in modifying hypotheses through his introspective methods derived from his own self-analysis.

The last group examines Freud's influence on his contemporaries (with special attention to Ferenczi) and on his followers, who have special problems in examining the life and work of a man with whom they have strong identifications.

The papers are all well written and relatively clear for this genre. Considering that there are two editors and nine authors and that the papers were written over a period of more than 15 years, there is remarkable flow and coherence. The book stands as a scholarly work, both in showing the development of Freud's thinking and as an adjunct to more purely historical accounts, such as Jones's biography of Freud (1) and Schur's *Freud: Living and Dying* (2).

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1. Jones E: The Life and Work of Sigmund Freud, 1st ed, vols 1–3. New York, Basic Books, 1953–1957
2. Schur M: Freud: Living and Dying. New York, International Universities Press, 1972

MAURICE J. BARRY, JR., M.D.
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Sexual Assault: The Victim and the Rapist, *edited by Marcia J. Walker and Stanley L. Brodsky. Lexington, Mass., Lexington Books (D.C. Heath and Co.), 1976, 175 pp., $15.00.*

As the incidence of reported rape increases, so does the literature on the topic. Walker and Brodsky have edited this book to achieve three goals: 1) to raise the complex issues of cause and prevention of rape and offer some preliminary answers, 2) to show the range of current developments in dealing with the victim and understanding rape, and 3) to offer a book that is both readable and scientifically sound.

Without any question the editors have achieved the first two goals. However, the chapters, which are based on papers presented at the 1975 conference titled Rape: Research, Action, Prevention, vary from the more readable, often action-approach focus to a more scientific consideration of the problem. Perhaps this unevenness was inevitable given the conference's focuses.

Not every chapter presents new ideas or new material; nevertheless, those working with rape victims and/or rapists and those attempting to establish prevention programs will find it helpful to read this book. Those concerned more generally with aspects of mental health could benefit as well.

The issues dealt with fall into several categories: 1) assumptions regarding the nature of rape and how these assumptions relate to prevention strategies, 2) consequences for victims of rape, 3) prevention of rape, 4) rape and race, 5) legal and social definitions of rape, and 6) criminal justice agencies.

Lynn Curtis, a research associate at the Bureau of Social Science Research in Washington, D.C., makes a significant contribution to the literature on rape. In his chapter "Present and Future Measures of Victimization in Forcible Rape" he discusses the contradictory nature of social statistical indicators of rape victimization and the role that police reporting bias possibly plays in this situation. In another chapter, "Rape, Race, and Culture," Curtis explores the meaning of

rape in black communities. Although according to Curtis a formal theory of rape among poor blacks would be premature, this material is set forth to provoke debate in order to stimulate the emergence of theory.

The research reported by Stanley Brodsky on prevention of rape should be read by all women as well as people working specifically to prevent rape. This study was a preliminary effort to study the verbal interactions between the potential victim and an assailant with a view toward preventing sexual assault. The author indicates that the development of a grid that presents patterns of attacker behavior and victim responses, although only a beginning, remains the next step toward prevention.

All in all this book adds to the rapidly emerging knowledge on sexual assault. The editors are to be commended for producing it and for including an index.

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The Psychoanalytic Study of the Child, Vol. 29, *edited by Ruth S. Eissler, Anna Freud, Marianne Kris, and Albert J. Solnit. New Haven, Conn., Yale University Press, 1974, 528 pp., $15.00.*

The high level of excellence of this annual publication has long been a tradition, and volume 29 does not detract from the merited reputation the series has achieved. It follows the established format of four sections titled Contributions to Psychoanalytic Theory, Aspects of Normal and Pathological Development, Clinical Contributions, and Applications of Psychoanalysis. The only departure from the usual format is a brief initial section honoring the memory of Berta Bornstein, who died in 1971. This section, which is made up of four short papers originally presented at the Memorial Meeting for Berta Bornstein at the New York Psychoanalytic Society and Institute on October 16, 1973, closes with a eulogy by Peter Blos and a bibliography of Berta Bornstein's writings.

Among the contributors to this volume are many well-known psychoanalysts: Margaret Mahler, Samuel Ritvo, Hans Loewald, Robert Bak, Lawrence Kubie, Jules Glenn, Otto Isakower, and Maurits Katan, to name a few.

The short paper by Mahler is a lucid and succinct account of "The Psychological Birth of the Human Infant," which Mahler sees as distinct from the "biological, actual birth experience." This view is predicated on careful observation and plausible reasoning, attributes with which readers of Mahler's works are certainly familiar.

Ritvo's paper on the infantile neurosis, discussed in this volume by Loewald, is a nicely organized presentation of the infantile neurosis from the standpoints of past and present psychoanalytic formulations, implications for diagnosis and technique, and the relationship of childhood to adult neurosis. Robert Bak's contribution, "Distortions of the Concept of Fetishism," is a welcome and lucid attempt to dispel some of the confusion involved in the use of the concepts of transitional object, infantile fetish, and childhood and adult fetishism.

Kubie returns to a favorite topic in his brief paper "Impairment of the Freedom To Change with the Acquisition of the Symbolic Process." In the section on Applications of Psychoanalysis, Jules Glenn deals in an interesting fashion with "The Adoption Theme in Albee's Plays," highlighting the neglect of this theme in the psychoanalytic literature. Katan's paper, "The Development of the Influencing Apparatus," deals with a relatively overlooked element in Freud's paper "A Case of Paranoia Running Counter to the Psychoanalytic Theory of the Disease" (1).

Of special interest is Isakower's paper, "Self-Observation, Self-Experimentation, and Creative Vision." This paper, which was read at the New York Psychoanalytic Society on February 27, 1945, is here published for the first time.

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1. Freud S: A case of paranoia running counter to the psycho-analytic theory of the disease (1915), in Complete Psychological Works, standard ed, vol 14. Translated and edited by Strachey J. London, Hogarth Press, 1957, pp 261–272

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Emotional Problems of Adolescents, 3rd ed., *by J. Roswell Gallagher, M.D., and Herbert I. Harris, M.D. New York, N.Y., Oxford University Press, 1976, 199 pp., $8.95.*

Coauthored by a pediatrician and a psychiatrist, this book is written primarily for nonmedical personnel, but professionals could benefit by reading it.

The various chapters deal with the impact of adults on adolescents, sexuality, achieving independence, and ways to help the youngster. Anxiety states and psychosomatic disorders as well as severe disorders are described. Further, the book addresses itself to antisocial behavior, including the abuse of alcohol and other drugs. There is an extremely interesting chapter titled "The Pitfalls of Testing." "Scholastic Failure" follows, and the last chapter is titled "What Price Success?"

Perhaps the most important things stressed by the authors throughout the book are the changeability of the adolescent, his or her need to grow and leave the dependency of childhood, and the necessity for the adult to treat the adolescent as an individual rather than reenact his or her own childhood through the teenager.

This is a relatively short book, but it is filled with a great deal of practical advice and written by authors who obviously understand teenagers. They recognize teenagers' changeability and the transient problems they may develop; at the same time the authors are alert to warnings of more serious difficulties that may arise during this period of life. The book is written in a nontechnical manner, which should be acceptable and useful (as the authors hope) to such people as ministers, camp counselors, and schoolteachers. It seems to me that it would also be useful to medical students and students in allied health and mental health disciplines. It is well written, concise, and quite practical.

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Power: The Inner Experience, *by David C. McClelland. New York, N.Y., Irvington Publishers (Halsted Press, John Wiley & Sons, distributor), 1975, 421 pp., $15.95.*

This timely book contains much of interest to those who work with people and their human motivations, to social sci-

entists who have a concern for the application of research findings, and to those who puzzle over why the nations of the world behave in seemingly irrational ways. It brings together the work of a number of researchers over a considerable time period and is, in some aspects, worldwide in scope. Even so, its lucid style makes the tabular summaries of findings quite comprehensible and gives the reader the satisfying feeling that he or she can see the bases for the interpretations offered. For the most part, it is exciting to read. A number of the instruments used and some additional tables are included in the appendix, which is followed by an extensive bibliography.

Starting with male American subjects, McClelland discusses ways of experiencing power, means of measuring the power motive, and how the power motive changes its expression at different stages of maturity. American females are examined next; note is made of the different means by which the power motive must be measured and the rather different modes of expression between men and women—particularly in the idea that giving may serve as fulfillment of the power need. The focus then shifts to India and a consideration of Indian national character from the point of view of the aspects of personality the author has already described for Americans. The same sort of scrutiny is then accorded to the strongly contrasting Mexican national character. This part of the book is completed with two case histories (that of Ram Dass, an American psychologist turned mystic, and Black Elk, an American Indian shaman) and power visions from the biblical book of Revelation.

From this point, the book turns to the application of the findings to current human problems. The author discusses power motivation and organizational leadership, empire builders, and the psychological basis of war. He draws on earlier work by himself and others to make these final chapters quite persuasive and certainly provocative. He sees the need for power as modified by and interacting with the need for achievement and the need for affiliation. In one interesting chart he presents the temporal relations between the occurrence of wars in which the United States has engaged, balanced or imbalanced motive levels for power and for affiliation, periods of religious revival and social reform, and actual war and peace. This is followed by an extensive discussion of the probable significance of these relationships for the future history of the world.

The last section, titled Are Wars Inevitable? seems to conclude that wars are certainly likely if mankind does not learn to make more consistent use of the tenets of any one of the current world religions. To me this seems akin to the needlessness of most illness: we know enough to keep ourselves healthy, both physically and mentally, yet we do not bestir ourselves sufficiently in applying this knowledge to avoid illness. The causes of both peace and health could be considerably enhanced, I believe, by much more vigorous educational efforts directed at providing the general public with a more adequate basis for making choices.

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Childhood Psychopathology and Adult Psychoses, *by Thomas Freeman. New York, N.Y., International Universities Press, 1976, 286 pp., $16.50.*

The value of a theory of adult psychoses in relation to psychopathological development in early childhood is to be measured by the degree to which it gives additional insights into the adult psychoses that can be useful for their understanding, treatment, and prevention. Conversely, data obtained from the study of adult psychoses that provide verification of a particular theory of childhood development are to be considered of great value. This book will be discussed from these points of view.

Dr. Freeman is a consultant psychiatrist at Holywell Hospital, Antrim, Northern Ireland, as well as at the Hampstead Child-Therapy Clinic in London. The title of his book promises to provide useful insights into the continuity or risk factors linking early childhood mental disorders and psychoses occurring in adult life.

From the point of view of psychoanalytic theory, Freeman's exposition is impeccable. He has taken Anna Freud's concept of developmental line and applied it step by step to adult patients he presents in case vignettes. Freeman's basic concepts are elegantly stated:

> There is nothing in these reconstructions to distinguish them from the reconstructed childhood histories of patients who suffer from neuroses and character abnormalities. . . . All that can be claimed on the basis of clinical observation is that those destined to develop a psychosis have failed in varying degrees to extricate themselves partly or wholly, from the earliest narcissistic stage. (p. 181)

That there is a fundamental dichotomy between this method of examination of mental disorder and clinical psychiatry is stated by the author: "The developmental approach to symptomatology avoids the danger of overestimating the significance of the form and content of the clinical phenomena" (p. 33). Indeed, although excerpts are given of patients' verbalizations with a statement of the psychotic diagnostic category to which Dr. Freeman has assigned each one, no organized case history is given that would permit the reader to decide whether these patients were correctly diagnosed. Thus, psychoanalysts are provided a discussion rich in theoretical content, as is attested to by Anna Freud in her introduction, but for those seeking insights that have clinical application in the healing process the discussion has little to offer.

For the child psychiatrist who is not seeking a tour de force of theorization, the precision of analogy also lacks clinical usefulness. One would wish to find some hints in the volume of preventive measures. The key concept is that of "descriptive and metapsychological similarity" (p. xi). This is carried through in each of the adult cases used in the argument, in which clinical excerpts are given together with detailed assignation of these clinically descriptive ideas to points on Anna Freud's developmental line. An example is as follows:

> With the disorganization of psychic structure during the acute psychotic attack, the patient's mental life approximates that of a young child prior to the differentiation of ego and id and self and object. (p. 110)

Throughout the volume analogy is consistently used as if it proved a reality, e.g.,

> During the psychosis Miss M. behaved in a manner akin to that of a child in the pre-oedipal phase insofar as she could not tolerate the frustration of an instinctual need. (p. 145)

Dr. Freeman does not see infantile psychosis as prototypical of the psychoses of adult life; I agree. Further, he does not find any normal or pathological childhood mental state that is an equivalent of the "passivity delusions" (p. 194) of the adult psychotic patient. His conclusion that predisposition to psychotic illness rests on Freud's concept of faulty mental childhood development, as stated in Freud's theories of libido and symptom formation in the neuroses, brings us back to Freeman's starting point: "A theory of predisposition that gives a prominent place to narcissism finds most favor with this writer, in spite of all the difficulties arising from its usage" (p. 278).

For those who believe that Freudian theory of development has been proven, this volume provides a contribution to the argument against those whom the author classifies as revisionists, such as Lidz and his colleagues. However, if *Childhood Psychopathology and Adult Psychoses* is to be examined in terms of its contribution to insights into adult psychoses from actual childhood behaviors or in terms of the degree to which it brings independent confirmatory data to bear on validation of Freudian theory of childhood development, it accomplishes neither purpose.

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Mental Handicap, *by Brian Kirman and Joan Bicknell. Edinburgh, Scotland, Churchill Livingstone (New York, N.Y., Longman, distributor), 1975, 473 pp., $39.50.*

This book reflects its authors' great clinical experience, gained in an atmosphere both hopeful and realistic, and their sincere regard for the management problems of not only institutions for the care of the mentally retarded but, more important, the families of retarded individuals. The ideal of "normalization" of the environment for the retarded is given its due, but it is not allowed to run to the fadistic extremes that it seems to me to do often in the United States. The authors recognize situations in which a particular handicap changes perceptual capacity to such an extent that normalization of the environment constitutes a disservice to the individual.

One example of this realistic attitude is in the discussion of the value of literacy, in which the authors conclude that this achievement may be given too high a rating as a goal for the mentally handicapped and may lead to a waste of training time. The attitude toward normalization is reflected in the following statement:

> While we may publicly profess our private anxiety to identify with the severely retarded, it would be perilous to ignore the fact that the context in which the severely handicapped learn and develop, not infrequently shows a specific difference when compared to the learning experience of their normal siblings.

Thus the difference between the retarded child and his or her normal siblings lies not only in the retarded child's needs but in our expectations of his or her performance.

Although this book is written from a generous, hopeful, realistic, empathic clinical point of view that is scientific but outstandingly humane, it contains no thorough discussion of the etiology of mild mental handicaps. Half of the book is devoted to the more exotic, distinctly biological syndromes. This section is sound, up-to-date, and well documented, making it a valuable reference section, but, from the point of view of the total problem of retardation, the cases cited make up only a small portion of the caseload of the retarded in any community.

The latter half of the book deals with broader problems of case management and the education of the retarded. This portion of the book is, for the most part, concerned with less retarded individuals. For example, the average IQ of the 40 individuals reported on in an appendix on employment experience is 62.7 (when verbal and performance scores were given they were averaged). The complications listed for these 40 individuals include one case of dystrophia myatonia and one heart lesion; there were no other physical disabilities other than two cases of speech defects and two of small stature. All other complications were in the behavioral sphere; the authors go to some length to stress that such complications must be viewed with great caution as indicators of brain damage.

The point is that the cases dealt with in the treatment and management section of the book are very different from those discussed in such detail in the general section on etiology. For the most part, the individuals referred to in the treatment section appeared to have higher IQs and no or few physical abnormalities, while the cases discussed in the section on etiology were more severe and were usually accompanied by physical abnormalities.

Nevertheless, the latter half of the book is of value. The various types of teaching techniques are well discussed. The issue of sexuality and its management is reassuringly dealt with, and the qualities necessary in the teacher of the retarded are listed and discussed. The assets and problems of behavior modification techniques are briefly taken up. Treatment in the community rather than in an institution is strongly favored, but this view is mellowed by the good clinical sense that pervades the book.

There is a chapter on English laws and regulations dealing with retardation. A similar summary of governmental regulations in the United States would be helpful, but I would not expect English authors to deal with this. The language is English rather than American. This stands out occasionally, particularly in a different use of commas.

In spite of the fact that the treatment and management section of this book addresses itself to milder cases than the section on etiology, *Mental Handicap* has real value.

PAUL V. LEMKAU, M.D.
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Review of Child Development Research, Vol. 5, *edited by E. Mavis Hetherington, John W. Hagen, Reuben Kron, and Aletha Huston Stein. Chicago, Ill., University of Chicago Press, 1975, 590 pp., $17.50.*

This is the fifth in a series commissioned by the Society for Research in Child Development oriented toward a broad interdisciplinary audience of people working with children in research and applied areas (including, of course, child psychiatrists) and presented, according to the editors, with a minimum of jargon and methodological detail.

The editors seem well aware that clinicians and other "tender" professionals are inclined to be psychoallergic to the experimental approach and to react with undue sensitivity to what they perceive, from their special perspective, as irrelevant trivia packaged in elegant statistical methodology. They have therefore attempted to bring together reviews that deal with ecology (of interest to today's child psychiatrist),

cooperation (of interest to the child therapist), the impact of television (of interest to the psychopathologist as well as to all parents), the understanding of social situations and relationships by the child (of interest to the group worker), and problems of attention, learning, and deafness (of interest to the school psychologist). The final chapter is a critical review of research in child abuse that covers most of the literature over the past 15 years. Altogether, it would seem that the clinician's needs have been particularly considered in this volume.

The book gets off to a good start with a contribution on the history of the child development movement by Sears. Because the author was part of the "ancient" history that he sets out to describe, he creates a very living account of the growth of the new discipline. Quotably, he considers "the uneasy mixing of theory and empirical study" and the "tremulous partnership" that continues to exist between academician and practitioner. Sensitively, he addresses himself to the emergence of "empathizable others" and the "empathic ethos" that characterizes this initial era. Competently, he traces the familiar history of the child guidance movement. Sympathetically and yet critically, he considers the monumental contributions of psychoanalysis and field theory.

Sears's essay should be made compulsory reading for every candidate taking Boards in child psychiatry. He stresses the need to return to relevancy as a guide to action, the need to carry out both process and substantive research, the need to treat children as malleable, changing individuals in a changing society, the need to respect the behavior of real people in a real world, the need to consider both innate and acquired factors, the need to deal with both experimental and theoretical issues, and, finally, the importance of thinking of the child as a whole, however nebulous, hollow, and unresearchable such a concept might seem to the investigator.

One cannot help but feel that had all of the chapters been written by Sears the book would have turned out far more readable and memorable. As it is, the other contributors are plagued by the disease of all reviewers, which is manifested by interminable sequences of citations that make the text very heavy going at times. Nevertheless, this in itself does not detract from the general value of volume 5 of this series for clinicians; if they have to work harder for their knowledge this may do them good because their professional diet is frequently overloaded with easily digestible anecdotal ingredients. If they want to keep up with behavioral science, they must accustom themselves to more rigorous fare.

To sum up, this volume provides critical information that should prove valuable to the psychiatric clinician in his or her daily work. It may even encourage some of them to join the Society for Research in Child Development and render it a little more responsive to relevant contemporary problems in the clinical field than it has been so far.

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Psychological Care of the Medically Ill: A Primer in Liaison Psychiatry, *by James J. Strain, M.D., and Stanley Grossman, M.D. Englewood Cliffs, N.J., Appleton-Century-Crofts (Prentice-Hall), 1975, 214 pp., $12.50.*

As is pointed out in the foreword, this is really a book on Montefiore Hospital. Much of the book is devoted to problems that were encountered in the establishment of meaningful psychiatric liaison there. Although the lessons of these experiences can certainly be generalized and applied in whole or in part to other settings, it is my belief that the attempts to deal with the broad subject of psychological care of the medically ill and with the story of Montefiore Hospital in the same book does not quite allow justice to be done to either subject.

In addition to the introductory chapters and those specifically devoted to the evolution of a liaison program by the primary authors, there is a chapter on "The Current Status of Psychosomatic Medicine" by Edward J. Sachar that discusses the history of theories of psychosomatic illness and touches on the current status of these theories. Dr. Sachar also contributes a chapter on "Evaluating Depression in the Medical Patient."

Norman Altman authors a chapter on hypochondriasis, which he defines as "a chronic condition dominated by preoccupation with bodily function and an unshakable belief that physical illness is present," that is, illness as a way of life and a way of relating. He speaks of the "inability of either psychiatrists or internists to integrate the behavioral and physical aspects of these disorders into a holistic understanding and management of the patient," which may be true. However, I have seen many cases such as those Altman describes handled expertly by the family practitioner of a generation ago. On the other hand, Altman's chapter offers an excellent clinical picture of the condition of hypochondriasis.

Francis D. Boudry and Alfred Wiener present a chapter titled "The Surgical Patient," which seems to be focused primarily on problems with the surgical service and the surgeon rather than problems of the surgical patient. Although this is generally an excellent chapter, one would hope that the authors exaggerate when they state that surgeons are able to recognize "only bizarre manifestations of psychological states . . . and may not have the time, knowledge or motivation to deal with them."

The chapter on the physician's response to the dying patient is covered by James Spikes and Jimmie Holland. Although there is a chapter titled "The Liaison Model of Coronary Heart Disease" that deals with some of the basic psychosomatic concepts of coronary disease and some of the psychological implications of coronary illness, there is no discussion of the very highly developed psychiatric liaison that has been involved with coronary care units in several settings. Other areas in which equally sophisticated liaison has developed in recent years that are not discussed are dialysis and renal transplant and the pain management center.

One might take exception to the chapter titled "The Anatomy of the Teaching Hospital," insisting that the authors have overemphasized the problems created by superspecialization and have overgeneralized them as applying equally to all teaching hospitals. On second thought, however, it would seem to me that the difference is perhaps a matter of degree and that their observations should be taken for what they are worth and applied to the reader's setting when the shoe fits.

The book gives an excellent account of the effort to develop a really meaningful and useful psychiatric consultation service at Montefiore Hospital—to institute in practice what we so often give lip service to, namely, the holistic concept of medicine and genuine concern for the people who happen to contain fascinating organs and pathology. There are many excellent anecdotes related in which the psychological impact of medical illness is illustrated and techniques for its tactful presentation to the nonpsychiatric physician, the medical student, and the nurse are described. There is a brief dis-

cussion of the nurse's role in liaison service, which has been so helpful with the management of the difficult patient not on the psychiatric service.

The brevity of the book is perhaps both an asset and a liability. One might complain that the subject of liaison psychiatry is not really fully covered. On the other hand, for anyone concerned with this subject, there is a great deal of value contained in a relatively brief and very readable document.

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Handbook of Evaluation Research, Vol. 1, *edited by Elmer L. Struening and Marcia Guttentag. Beverly Hills, Calif., SAGE Publications, 1975, 676 pp., no price listed.*

Handbook of Evaluation Research, Vol. 2, *edited by Marcia Guttentag and Elmer L. Struening. Beverly Hills, Calif., SAGE Publications, 1975, 716 pp., no price listed.*

Here is everything you wanted to know (well, almost) about evaluation research and a good bit besides. This two-volume set was sponsored by the Society for the Psychological Study of Social Issues, contains 37 chapters by 45 authors, and was meant to be exhaustive. It is exhausting, for certain, but then it can be safely predicted that very few persons will read it through under the same conditions as are necessary for a reviewer. It is called a handbook, and, although it is not quite that, the set will probably be used as a basic reference work. Some of the material has appeared elsewhere in some form or another, but the collection of material is quite useful and of generally high quality and high reader interest.

Volume 1 consists of basic material on evaluation research, beginning with policy and strategy in evaluation research, design of evaluation studies, development of measures, data collection by interviews and records, evaluation through social ecology, data analytic methods, and communication of evaluation results. For the most part the material is well chosen and well presented, the ideas are up-to-date, and in general it is comprehensive and helpful. On the other hand, it must be noted that the presentation is scarcely geared to the novice; it will be most useful to readers who already have a fair amount of experience or training in evaluation research.

Volume 2 is oriented largely to program evaluation in the field of mental health and should be of distinct interest to professionals with responsibility for mental health programs, whether they have a direct responsibility for evaluation or not. There is an initial section on politics and values in evaluation research that is quite stimulating and should be of very general interest, as should the two subsequent chapters on cost-benefit and cost-effectiveness analysis. The latter two chapters will be especially helpful to social scientists with considerable interest and little training in economic analysis. A subsequent section on evaluation of mental health programs includes a mixed lot of chapters reporting specific evaluation efforts or reviewing literature in some area of program performance. These chapters will be of principal interest to professionals in the field of mental health. Volume 2 concludes with three chapters reporting evaluation efforts in the fields of early childhood educational interventions, public health programs, and new careers programs. All three make good reading for those with an interest in the content area.

These two volumes were prepared and edited by thoughtful and experienced workers with a good bit of personal experience in evaluation. They chose materials very wisely from among those available, and they solicited and obtained pieces from some (one is tempted to say most) of the best-known figures in evaluation research so that the work is both stimulating and authoritative. The cost of the two volumes together is high; not many individual readers may feel that the investment is worthwhile. However, I predict that persons with a continuing commitment to program evaluation at a professional level will, if they acquire these volumes, refer to them frequently and with profit.

LEE B. SECHREST, PH.D.
Tallahassee, Fla.

Research in Psychophysiology, *edited by Peter H. Venables and Margaret J. Christie. New York, N.Y., John Wiley & Sons, 1975, 437 pp., $32.00.*

The editors have collected and edited a series of excellent essays on psychophysiological problems for researchers and clinicians. Peter Venables writes two excellent reviews himself; these give the book more than an additional fillip.

The book is divided into three sections covering a wide array of methodological problems and states as well as subjects that are clearly defined as psychophysiological. I am unaware of the definition and boundaries of "traditional" psychology, experimental psychology, and physiological psychology. However, for psychiatrists today psychophysiology must be considered in the mainstream.

That the "classical" boundaries between discipline areas have long since been breached is clearly exemplified in Venables' review of schizophrenia and his epilogue chapter, which includes comments on what he terms "high risk" research. I feel that these two chapters would be well worth the price of the book.

I found the chapters on memory, pleasure (including humor), psychopathy, and precursors of disease especially well written. From the psychological laboratories in Stockholm Marianne Frankenhauser's review of sympathetic-adrenomedullary activity, behavior, and the psychosocial environment raises tantalizing questions about aspects of cognition and catecholamine secretion or arousal.

The chapter on psychopathy by Robert Hare of British Columbia, which includes subsections on autonomic correlates and cortical correlates, raises sophisticated issues about the mechanism of learning at different integrative levels. Irene Martin of the London Insititue of Psychiatry writes a fine chapter on conditioning with a review of its history and a breakdown of the two simple conditioning models. The days of the simple S-R response are over. The problem of understanding the complex interactions of cognitive and autonomic factors as well as behavioral and perceptual responses may initially make one feel that the walled-in universe of understanding has fallen in.

Indeed, the book forces all clinicians to reevaluate and assess again their clinical experience by looking more closely at the biological and physiological bases of behavior. Earlier rigid theoretical views are in a shambles and must be reexamined in the light of existing physiological data. The psychophysiologists are challenging the classicists of all stripes, especially analytic theoreticians, to see how complex the world is.

I feel that this book is especially valuable for residents in

training and clinical researchers. The bibliographies are adequate for all serious students. Practitioners who are removed from the laboratories may find the reading difficult but worth the investment of time.

RALPH N. WHARTON, M.D.
New York, N.Y.

The Insanity Defense: A Blueprint for Legislative Reform, *by Grant H. Morris. Lexington, Mass., Lexington Books (D.C. Heath and Co.). 1975, 126 pp., $10.00.*

This book reflects the author's views on the problem of the insanity defense that were submitted to the Criminal Code Commission of the Arizona State Legislature. Professor Morris brought to this task his own rich experience as staff attorney of the Institute of Public Administration in New York; he also holds faculty appointments in both medicine and law.

This work is an excellent introduction to the complexities, paradoxes, good intentions, and failings of the legal system in its attempt to deal with the moral issue of guilt and the historically derived but far from clear acceptance of psychiatric testimony in such determinations.

Professor Morris has produced a monograph that will be particularly useful to the psychiatrist preparing for his specialty Boards. Those who are interested in issues of forensic psychiatry and want a clear and ready reference to the different standards pertaining to the insanity defense in different jurisdictions will also find this book useful. Written with an acceptance of psychiatric expertise in general (a refreshing change), it recognizes that psychiatric expertise and diagnosis are not readily translated into social and legal terms. A particular strength of the book is the discussion of the complexities and nuances of language in the various standards governing the insanity defense as they have been introduced either by courts, as in the case of the Durham rule, or by legislative statute, as in the adoption of the American Law Institute's Model Penal Code.

Professor Morris makes one comment that deserves particular emphasis and general recognition. He implies that problems in the area of mental health are aggravated by adversary debate in court. Coming from an attorney, this is doubly refreshing because we live in a setting in which complex public policy issues are too often argued, and argued with a bias, in court. Morris counterposes the synthetic and conciliatory process of legislation and advocates this as the best way of achieving real progress. On the basis of his experience, he finds this the most constructive approach for the resolution of the serious problems that continually confront us in the mental health area.

Professor Morris makes one suggestion that, in many ways, appears to be an improvement over the standard set by the American Law Institute (ALI) but that possibly opens up a Pandora's box for our society. He advocates the following standard as an improvement over that of the ALI:

> A person is not criminally responsible for his conduct if, as a result of impairment of his mental or emotional processes or behavior controls, he lacked, at the time of such conduct, substantial capacity either to appreciate the wrongfulness of his conduct or to conform his conduct to the requirements of law.

The wording and the intent of this is to deemphasize medical testimony and permit introduction of evidence that describes the defendant's social and emotional impairment as well as his or her psychological impairment. Whether our society and public policy is well served by such an enlargement of the insanity defense is, I think at this point, not proven and probably not generally accepted.

The concept of the bifurcated trial appeals to many psychiatrists. In the first stage, the court determines whether the defendant committed the act of which he is accused. In the second part, the court with psychiatric advice makes a determination of the mental state of the accused at the time of the act and decides the sentence, punishment, or rehabilitation. Professor Morris cogently argues that in our legal system such a proposition is contrary to the fundamentals of law and runs counter to established precedent. To employ such a bifurcated trial would, indeed, take away the right of the accused to present in front of his peers a defense that, regardless of the physical act, evil intent was absent. Without evil intent there can be no guilt and no verdict of guilty.

Finally, Professor Morris takes to task most of the jurisdictions for holding individuals exculpated by reason of insanity to very stringent criminal standards of confinement. He finds that this is not only illogical but also inequitable. He also argues strongly the merits of defense based on the diminished responsibility test and would like to see the following used:

> Evidence of impairment of the defendant's mental or emotional processes or behavior controls shall be admissible whenever it is relevant to prove that the defendant did not have a state of mind which is an element of the crime charged. Whenever the court or jury finds a defendant not guilty because of such proof, the trial court may order the prosecutor to commence civil commitment proceedings in accordance with the procedures of the mental health code.

As a profession, psychiatry has failed to develop ethically sound policies as to the conditions under which we will act and the lengths to which we will go in the adversarial process. Only sophisticated expertise plus strong professional integrity will protect the practicing psychiatrist from being enveigled and traduced into uncomfortable and untenable legal situations. Seymour Pollack has advocated accreditation for forensic psychiatrists for some time (1). If the specialty of psychiatry cannot make this step, perhaps it is time that legislatures and courts pay significant attention to the training and expertise of psychiatrists and limit the testimony of experts to those who are indeed experts.

REFERENCE

1. Pollack SL: The president's message. Bulletin of the American Academy of Psychiatry and the Law 3:4–5, 1976

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This Month's Reviewers

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

The Intrapsychic Self: Feeling and Cognition in Health and Mental Illness, abridged ed., *by Silvano Arieti. New York, N.Y., Basic Books, 1976, 338 pp., $4.95 (paper).*

At Risk: An Account of the Work of the Battered Child Research Department, NSPCC, *by Edwina Baher, Clare Hyman, Carolyn Jones, Ronald Jones, Anna Kerr, Ruth Mitchell, and Raymond Castle. Boston, Routledge & Kegan Paul, 1976, 241 pp., $10.25 (paper).*

The Evolution of Psychoanalytic Technique, *edited by Martin S. Bergmann and Frank R. Hartman. New York, N.Y., Basic Books, 1976, 482 pp., $17.50.*

Le Projet Psychothérapique: De l'Activation à l'Auto-Activation, *by Mario Berta and Jean Claude Benoit. Paris, France, Denoël, 1976, 205 pp., no price listed (paper).*

Paper Victories and Hard Realities: The Implementation of the Legal and Constitutional Rights of the Mentally Disabled, *edited by Valerie Bradley and Gary Clarke. Washington, D.C., Health Policy Center, Georgetown University, 1976, 144 pp., $4.00 (paper).*

Alcohol Control Policies in Public Health Perspective. Finnish Foundation for Alcohol Studies Vol. 25, *by Kettil Bruun, Griffith Edwards, Martti Lumio, Klaus Mäkelä, Lynn Pan, Robert E. Popham, Robin Room, Wolfgang Schmidt, Ole-Jørgen Skog, Pekka Sulkunen, and Esa Österberg. Helsinki, Finland, Finnish Foundation for Alcohol Studies (New Brunswick, N.J., Rutgers University Center of Alcohol Studies, distributor), 1976, 106 pp., $8.00.*

Community Mental Health: Target Populations, *by Ann Wolbert Burgess, R.N., D.N.Sc., and Aaron Lazare, M.D. Englewood Cliffs, N.J., Prentice-Hall, 1976, 272 pp., $11.50.*

Rx: The Christian Love Treatment, *by Dr. Alphonse Calabrese and William Proctor. Garden City, N.Y., Doubleday & Co., 1976, 188 pp., $5.95.*

Environmental Interaction: Psychological Approaches to Our Physical Surroundings, *by David Canter and Peter Stringer, with Ian Griffiths, Peter Boyce, David Walters, and Cheryl Kenny. New York, N.Y., International Universities Press, 1976, 362 pp., no price listed.*

Sleep, Nutrition and Mood, *by A.H. Crisp and E. Stonehill. New York, N.Y., John Wiley & Sons, 1976, 166 pp., $15.95.*

William Alanson White: The Washington Years, 1903–1937, *edited by Arcangelo R.T. D'Amore, M.D., with the assistance of A. Louise Eckburg. Washington, D.C., St. Elizabeths Hospital, National Institute of Mental Health, 1976, 176 pp., no price listed (paper).*

The Social Setting of Mental Health, *edited by Alfred Dean, Alan M. Kraft, and Bert Pepper. New York, N.Y., Basic Books, 1976, 392 pp., $17.50.*

Hypnosis and Behavior Therapy, *edited by Edward Dengrove, M.D. Springfield, Ill., Charles C Thomas, 1976, 387 pp., no price listed.*

Genetic Diversity and Human Equality, *by Theodosius Dobzhansky. New York, N.Y., Basic Books, 1976, 123 pp., $3.95 (paper).*

Activity, Recovery, Growth: The Communal Role of Planned Activities, *by Joan Erikson, with David and Joan Loveless. New York, N.Y., W.W. Norton & Co., 1976, 278 pp., $10.95.*

Case Studies in Behaviour Therapy, *edited by H.J. Eysenck. Boston, Mass., Routledge & Kegan Paul, 1976, 349 pp., $19.00.*

Behavior Mod and the Managed Society, *by Robert L. Geiser. Boston, Mass., Beacon Press, 1976, 169 pp., $9.95.*

Assuring Quality in Medical Care: The State of the Art, *by Richard Greene, M.D. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 287 pp., no price listed.*

Family Therapy: Theory and Practice, *edited by Philip J. Guerin, Jr., M.D. New York, N.Y., Gardner Press (Halsted Press, John Wiley & Sons, distributor), 1976, 547 pp., $24.50.*

Narcolepsy. Advances in Sleep Research, Vol. 3, *edited by Christian Guilleminault, William C. Dement, and Pierre Passouant. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 684 pp., $40.00.*

Pharmacology of Behavior and Memory, *by R. Yu. Il'Yuchenok; translated by Scripta Technica, Inc. Washington, D.C., Hemisphere Publishing Corp. (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 190 pp., $22.50.*

Pediatric Neurology Handbook, 2nd ed., *by J.T. Jabbour, M.D., Danilo A. Duenas, M.D., Richard C. Gilmartin, Jr., M.D., and Marvin I. Gottlieb, Ph.D., M.D. Flushing, N.Y., Medical Examination Publishing Co., 1976, 511 pp., $15.00 (spiral-bound).*

Critique of Psychoanalysis. Bollingen Series, *by C.G. Jung; translated by R.F.C. Hull. Princeton, N.J., Princeton University Press, 1975, 244 pp., $3.45 (paper).*

Progress in Psychiatric Drug Treatment, Vol. 2, *edited by Donald F. Klein, M.D., and Rachel Gittelman-Klein, Ph.D. New York, N.Y., Brunner/Mazel, 1976, 653 pp., $27.50.*

A Harry Stack Sullivan Case Seminar: Treatment of a Young Male Schizophrenic, with Comment, Twenty-Five Years Later, by John C. Dillingham, Stanley Jacobson, Ed.D., Robert G. Kvarnes, M.D., and Irving M. Ryckoff, M.D., *edited by Robert G. Kvarnes, M.D., and Gloria H. Parloff. New York, N.Y., W.W. Norton & Co., 1976, 238 pp., $12.95.*

Life and Death in Psychoanalysis, *by Jean Laplanche; translated by Jeffrey Mehlman. Baltimore, Md., Johns Hopkins University Press, 1976, 147 pp., $10.00.*

Firewater Myths: North American Indian Drinking and Alcohol Addiction, *by Joy Leland. New Brunswick, N.J., Publications Division, Rutgers Center of Alcohol Studies, 1976, 153 pp., $7.50.*

The Dyadic Cyclone: The Autobiography of a Couple, *by John Lilly and Antonietta Lilly. New York, N.Y., Simon and Schuster, 1976, 287 pp., $8.95.*

The Post-Physician Era: Medicine in the Twenty-First Century, *by Jerrold S. Maxmen. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 285 pp., no price listed.*

On Guilt and Innocence: Essays in Legal Philosophy and Moral Psychology, *by Herbert Morris. Berkeley, Calif., University of California Press, 1976, 161 pp., no price listed.*

Long-Term Care Data: Report of the Conference on Long-Term Health Care Data, *edited by Jane H. Murnaghan. Philadelphia, Pa., J.B. Lippincott Co., 1976, 233 pp., no price listed (paper).*

Who Will Marry Whom? Theories and Research in Marital Choice, *by Bernard I. Murstein. New York, N.Y., Springer Publishing Co., 1976, 385 pp., $15.95.*

A History of Clinical Psychology: Enlarged Edition of The Development of Clinical Psychology, *by John Reisman. New York, N.Y., Irvington Publishers (Halsted Press, John Wiley & Sons, distributor), 1976, 408 pp., $15.95.*

Experimenter Effects in Behavioral Research, enlarged ed., *by Robert Rosenthal. New York, N.Y., Irvington Publishers (Halsted Press, John Wiley & Sons, distributor), 1976, 471 pp., $15.95.*

Hyperactivity: Research, Theory, and Action, *by Dorothea M. Ross and Sheila A. Ross. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 365 pp., $18.95.*

Stress and Anxiety, Vol. 3, *edited by Irwin G. Sarason and Charles D. Spielberger. Washington, D.C., Hemisphere Publishing Corp. (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 344 pp., no price listed.*

Methodologies of Hypnosis: A Critical Appraisal of Contemporary Paradigms of Hypnosis, *by Peter W. Sheehan and Campbell W. Perry. Hillsdale, N.J., Lawrence Erlbaum Associates (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 316 pp., $18.00.*

Issues in Brain/Behavior Control, *edited by W. Lynn Smith, Ph.D., and Arthur Kling, M.D. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 149 pp., no price listed.*

The Passions, *by Robert C. Solomon. Garden City, N.Y., Anchor Press/Doubleday, 1976, 435 pp., $9.95.*

Cowdry's The Care of the Geriatric Patient, 5th ed., *edited by Franz U. Steinberg, M.D. St. Louis, Mo., C.V. Mosby Co., 1976, 503 pp., $29.50.*

The Depressed Woman: A Study of Social Relationships, *by Myrna M. Weissman and Eugene S. Paykel. Chicago, Ill., University of Chicago Press, 1976, 279 pp., $4.95 (paper).*

Great Experiments in Behavior Modification, *abstracted by Jerry Willis and Donna Giles under the general editorship of B.R. Bugelski. Indianapolis, Ind., Hackett Publishing Co., 1976, 282 pp., no price listed.*

Psychoanalysis and Catholicism, *edited by Benjamin B. Wolman. New York, N.Y., Gardner Press (Halsted Press, John Wiley & Sons, distributor), 1976, 212 pp., $19.95.*

Report of the Secretary
Summary of Meetings of Board of Trustees and Executive Committee
May 1975–May 1976

IT IS A personal privilege as well as my constitutional duty to report the actions of the Board of Trustees since the last annual meeting. With the invaluable collaboration of Dr. Sabshin, Mrs. Ruth Arnold, and others in the Central Office, I have subdivided the actions into several categories. Each category has been noted as briefly as possible; no transactions have been omitted other than confidential judgments on ethics. As a preliminary summary, I shall highlight the detailed report.

Suggested revisions of the Constitution and By-Laws. Since the Board withdrew its initial revisions of our Constitution for further improvement through consultations with district branches, area councils, and the Assembly, I will summarize this section very briefly.

In accordance with the mandate of the Key Conference that the policy-setting bodies and the administration of APA be made more alertly sensitive and reactive to the interests and wishes of the membership, a task force composed of representatives of the Assembly and the Board met repeatedly with the Committee on Constitution and By-Laws, and later with expert legal consultants, to revise our Constitution in optimum fashion. Insofar as the time schedule prescribed by the Key Conference permitted, input was solicited from the district branches and area councils. By consensus, the following amendments were proposed by the Board for Assembly approval: 1) a constitutional preamble that more clearly states the social and humanitarian as well as the scientific ideals and objectives of APA; 2) a reconstituted Assembly with representatives more democratically nominated and elected and with special minority representation, thereby being more responsive to regional and interregional interests; 3) an Assembly Executive Committee (with only two representatives from the Board) to which many of the fiscal and organizational initiatives of the present Trustees would be transferred; 4) a Board of Trustees reduced to the national officers, the Speaker and Speaker-Elect of the Assembly, and four Trustees-at-Large to encompass the national and international interests of the Association (the alternative of seven Area Trustees was seriously considered); 5) a dynamic interrelationship between the Assembly and the Board was envisaged so that each, with the approval of the other, could effect action for the benefit of APA—pocket vetoes would be eliminated, and occasional differences resolved either in a joint conference committee or by the vote of the membership; 6) a new Committee of the Association composed of two past Speakers, two past Presidents, and two general members to serve as additional ombudsmen for the membership; 7) improved provisions for direct action by the membership through initiative resolutions and mailed ballots for setting of policy, for recall of any national officer, and for future amendments. Since our articles of incorporation specified a single administrative body, and some of these revisions may also have significant bearing on our IRS status, lawyers were consulted and conflicting opinions considered.

The Assembly. The Trustees approved and funded a nation-wide plan to implement district branch peer review programs.

Councils, committees, task forces, and commissions. The Trustees 1) established a new Council on Children, Youth, and Their Families, with initial funding; 2) established a new Joint Commission on Public Affairs with a salaried director to promote and maintain the optimum public image of psychiatry as a medical as well as a psychosociological specialty; 3) approved continued medical training as essential in all psychiatric residency programs; 4) reinstituted the Commission on Drug Abuse; and 5) approved a survey of electroconvulsive therapy by a task force to be funded by special grants.

Elections. The Trustees drafted an ethical code for all candidates, arranged for rotation of their listing on ballots, deleted current officers' names from all voting stationery, prohibited official recommendations or the use of organizational funds, and took other steps to assure that APA elections at all levels be conducted in as fair and dignified a manner as possible.

Insurance. The Trustees approved tax deferral plans and explored the availability of favorable professional liability rates for APA members and authorized an audit of the Retirement Plan Trust and its transfer to a financially responsible corporate trustee.

Legal matters. The Trustees 1) considered that having APA act as its own malpractice insurer was inadvisable; 2) declined to take a legal position as to third-party payments to the American Association of Marriage and Family Counselors,

This is an edited version of the report presented by the Secretary to the annual business meeting in Miami, Fla., May 11, 1976.

Inc., versus CHAMPUS; 3) promoted more effective liaison between district branches and the APA Commission on Judicial Action; 4) initiated inquiry as to a separate emergency litigation fund that would not impair our favorable IRS status; 5) authorized an initial salary for a staff expert on legislation to monitor the psychiatric implications of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641) and to advise as to favorable mental health provisions; and 6) approved having representatives from each state on the renamed Joint Commission on Government Relations.

Liaison with other organizations. The Trustees implemented closer cooperation with the American Board of Psychiatry and Neurology as to policies, optimal APA representation, conjoint training in medicine, neurology, psychopharmacology, crisis and community care, methods of examination, and issues related to certification and recertification and voted to admit the Coalition for Alcoholism Program Accreditation to the JCAH Accreditation Council.

Meetings. The Trustees approved cosponsorship of the Conference on Psychiatric Classification in June 1976, a joint meeting with the Canadian Psychiatric Association in 1977, the World Federation for Mental Health in Vancouver in 1977, the Second Pacific Congress of Psychiatry, probably in Honolulu in 1980, and other conjoint or sponsored meetings with appropriate conditions and at no expense to APA. (Atlanta, Ga., was selected for the 1978 annual meeting.)

Membership matters. The Trustees interpreted the By-Laws to read that members who forfeited membership-at-large must continue membership in a district branch and endorsed Assembly policy that transfers of membership must be approved by both the district branches involved and ethical qualification be reviewed during such transfers.

Position statements and resolutions. The Trustees 1) drafted an urgent communication to Health Systems Agencies that Public Law 93-641 should hold mental and physical health to be inseparable; 2) approved racial and ethnic desegregation in all hospitals, not only in public ones; 3) clarified the relative qualifications and responsibilities of medical versus nonmedical administrators; 4) joined with many other national and international scientific organizations in protesting the resolution of the United Nations General Assembly equating Zionism with racism as dramatically contradicting its previously instituted "Decade Against Racial Discrimination"[1]; 5) approved, with modification, new "Guidelines for Continuing Education."

I trust that every member of APA is aware that he or she can attend any session of the Board or of any APA component other than those devoted to judging ethical complaints. If attendance is impractical, I shall welcome correspondence on any topic for either direct action by the Trustees or forwarding to the relevant council, commission, committee, task force, or APA staff for appropriate consideration and action.

My prime function as Secretary has been and will be to keep no secrets from the membership, other than confidential ethical proceedings, and to invite your guidance in Association matters as indicated. My detailed report begins with the Constitution and By-Laws because of its immediate relevance to membership action. The remaining categories are listed in alphabetical order. The Board (or its Executive Committee acting as its agent) took the following actions.

[1]On April 28, 1976, Ambassador William Scranton asserted that the policy of the United States was identical with that expressed by APA.

CONSTITUTION AND BY-LAWS

1. Accepted the Assembly's recommendation to add the advocacy function for providing mental health services for patients and the public as a specific objective of the Association (Bd., May '75); approved the recommendation of the Committee on Constitution and By-Laws for its inclusion as (f) of Article II, Section 1 (Bd., Dec. '75); and at a special meeting adopted the language, "to promote the best interests of patients and those actually or potentially making use of mental health services," as being more in line with the APA articles of incorporation (Bd., Mar. '76).

2. Approved the Constitution and By-Laws Committee's (CCBL) recommendation that Article III be amended to include a new category of Provisional Members, who shall be "physicians . . . in their first year of an approved psychiatric residency training program, or approved internship preparatory to entering such an approved psychiatric residency," and specified that the category shall be without voting privileges (Bd., Dec. '75).

3. Approved new wording in Chapter Two, Section 1, of the By-Laws for membership processing by providing that an applicant for membership "may be refused election or promotion to more advanced membership, or transfer to another district branch, on the basis of the provisions of Chapter One of the By-Laws or on the basis of criteria of ethical and professional suitability established by the Board and the Membership Committee and applied by the appropriate district branch" (Bd., Dec. '75).

4. Approved amending Chapter Three, Section 3, of the By-Laws to reduce ambiguity regarding eligibility of Board members in unexpired terms and reelections by specifying: "An appointed Trustee who fills an unexpired term is eligible for election to a full term. An elected Trustee, following a three-year term, may succeed himself. Following two full terms, a Trustee becomes eligible for election again only after an interval of three years" (Bd., Dec. '75).

5. Approved the CCBL recommendation for amending Chapter Seven, Section 6, of the By-Laws to give the Assembly the same opportunities and remedies as the Forum without undue interference by the Board; and provided that a "circulated referendum shall carry with it both the opinion of the Board and the opinion of those initiating the referendum" (Bd., Dec. '75).

6. Approved the CCBL-recommended amendment for Chapter Eight, Section 6, of the By-Laws—considered advisable based on information received from the Postal Service regarding second-class mail and the IRS—to specify that the dues "will include amounts allocated to subscriptions for *The American Journal of Psychiatry* and for *Psychiatric News*. The membership application shall contain a provision for allocation of a specific portion of the dues to pay the cost of periodical subscriptions to these publications" (Bd., Dec. '75).

7. Adopted the CCBL recommendation and authorized amendments to permit substituting the term "chairperson" for "chairman" at every point in the Constitution and By-Laws where it appears (Bd., Dec. '75).

8. Approved in principle the recommendations of the Joint Conference Committee on the Key Conference Recommendations as guidelines for constitutional change (Bd., Feb. '76).

9. Took the following actions to provide an enabling mechanism "which leaves the options open for action on the report within the March 11, 1976 deadline, without mandating such action": approved appointment of an Ad Hoc Com-

mittee on the Revision of the APA Constitution, comprised of the Speaker and Speaker-Elect, the President and President-Elect, the Treasurer, the Committee on Constitution and By-Laws, and certain other members of the Joint Conference Committee on Key Conference Recommendations; charged this ad hoc committee (under the chairmanship of Dr. Marmor) with submitting specific or alternative amendments to the Constitution along the lines of the Joint Conference report and in the light of past and future discussions by the Assembly and the Board, for approval by the Board and passage or rejection by the membership; and charged this ad hoc committee with distributing the report of the Joint Conference Committee, the analysis of this report by the Committee on Constitution and By-Laws, and other relevant documents to the area councils and district branches, with a request for feedback (Bd., Feb. '76).

10. Approved the entire proposed Constitution and By-Laws as a complete document, with the minor wording and grammatical changes that had been suggested in the discussion (Bd., Mar. '76).

11. Asked that the completed, approved Constitution and By-Laws be transmitted to the Secretary prior to March 11, 1976 (60 days before the annual meeting), that staff investigate the suggested option contingencies, but that this investigation not preclude its presentation before the deadline (Bd., Mar. '76).

12. Authorized up to $2000 for the purpose of obtaining a second opinion regarding the legal aspects of the proposed restructuring of the American Psychiatric Association (Bd., Mar. '76).

13. In accordance with their December ruling that deficit spending must be approved by a two-thirds vote of the Board, the Trustees approved the expenses of the three days of meetings involved in this proposed revision of the APA Constitution and By-Laws: the Board of Trustees meeting on March 7, 1976, and the two-day "constitutional mini convention" that preceded it on March 5 and 6 (Bd., Mar. '76).

ASSEMBLY

1. Approved increasing the Assembly budget for 1975–1976 by $3500 to provide for implementation of a pilot insurance coding project (first proposed by the Task Force on Confidentiality in Relation to Third-Party Payment) to devise a coding system by which the use of clinical diagnoses could be avoided (Ex. C., Apr. '75).

2. Approved the Reference Committee's recommendation for a plan to implement peer review—in which one member of the Peer Review Committee will visit the district branches (40 this year and 40 the next year) to help develop an effective peer review mechanism in every district branch; specified that the program would have to be implemented in such a way that $22,400 not be overreached; and left it to the discretion of the Medical Director to phase in the program within these policy specifications (Bd., Dec. '75).

COUNCILS, COMMITTEES, TASK FORCES, AND COMMISSIONS

1. Terminated the Ad Hoc Committee To Plan the Key Conference, with thanks to the committee and APA staff; asked the President to appoint an Ad Hoc Committee on the Key Conference Recommendations, in the manner of the Assembly task force already designated, to move in the direction of implementing the Key Conference suggestions (Bd., May '75).

2. Renewed three ad hoc committees for another year: Ad Hoc Committee To Plan a Conference on Law and Psychiatry, Ad Hoc Committee on Election Procedures, and Ad Hoc Committee on Interprofessional Services (Bd., May '75).

3. At the request of the Editor, approved second terms on the Editorial Board of the *American Journal of Psychiatry* for Drs. Morris A. Lipton, John C. Nemiah, and Chester M. Pierce (Bd., Dec. '75).

4. Asked the Reference Committee to explore fully the fiscal aspects of establishing another council (Bd., May '75); approved establishment of a Council on Children, Youth, and Their Families, beginning April 1976, with the stipulation that the charge be refined and structure be kept minimal at first (Ex. C., June '75); approved the charge developed by the Commission on Childhood and Adolescence; and accepted the title change to "Council on Children, Adolescents, and Their Families" (Bd., Dec. '75).

5. Authorized $1500 additional funding to support travel expenses for members of the Committee of Residents to meetings other than the annual meeting; and endorsed the Reference Committee's commendation of the Committee of Residents for its extensive activities during the past year on public information, liaison activities, recruitment, problem solving, and ongoing program review (Bd., Dec. '75).

6. Approved establishment of a Committee on Advertising Policy within the Council on Internal Organization, and authorized $300 in additional funds in fiscal year 1976–1977 to support both this committee and a Task Force To Study the Impact of Potential Loss of Pharmaceutical Support if the policy were changed—with the request that the Council chairperson seek and solicit participation by the Assembly (Bd., Dec. '75).

7. Endorsed the move of the Committee on Conventions to merge the subcommittees on technical and scientific exhibits, and approved the Council's appointment of an Ad Hoc Committee on Spouses' Scientific Program, and authorized funding up to $1000 (Bd., Dec. '75).

8. Approved the Reference Committee's recommendations that it become APA policy that all new awards established by the Association be self-sustaining, the Medical Director be authorized to seek additional funds to continue the Hofheimer Award, and the Deputy Director for Business Administration be authorized to develop an APA Award Fund, using the unrestricted funds in the grants and awards account and funds presently in the special purposes account to establish new awards where appropriate and to help fund existing award programs that run out of funds (Bd., Dec. '75).

9. Endorsed the principle of developing a membership brochure as suggested at the Key Conference, and asked staff to explore the revision with appropriate committees, including the Committee on Membership, the Assembly Membership Committee, and the Committee of Residents (Bd., Dec. '75).

10. Authorized the Medical Director to seek outside funding to support two studies by the Membership Services and Studies Division: one to identify nonmember psychiatrists, and the other to conduct a manpower survey of nonmember and member psychiatrists (Bd., Dec. '75).

11. Asked the Committee on Public Information to consid-

er development of a public affairs network similar to the district branch legislative network (Ex. C., Sept. '75); approved establishment of a Joint Commission on Public Affairs, to report directly to the Board of Trustees and the Assembly, appointments to be made jointly by the President and the Speaker: authorized funds (up to $30,000) to hire an Assistant to the Director of Public Affairs, and left it to the discretion of the Medical Director to implement by degrees, within available funds for program expansion (Bd., Dec. '75).

12. Gave approval to the sense of an Assembly resolution regarding establishing requirements for exposure to clinical medical responsibility as part of the graduate psychiatric training leading toward certification by the ABPN; and agreed to use the resources of the APA to facilitate graduate psychiatric education to include responsibility for the care of the medically ill patient (Ex. C., June '75).

13. Strongly endorsed the Reference Committee's commendation of Howard M. Kern, M.D., for his service to APA as Associate Director for Continuing Education and his years of assistance to the Council on Medical Education and Career Development (Bd., Dec. '75).

14. Approved the recommendation by the Committee on Women and the Council on National Affairs that child care be arranged during each APA annual meeting, with the understanding that such services shall be self-supporting—and discontinued if they are not (Bd., Dec. '75).

15. Approved establishment of a Committee on Indian Affairs as the task force so designated is being terminated; and noted that a number of consultants are being appointed, at no additional expense to the APA—their funding to come from the agencies they serve, or from grants supporting the work of the committee (Bd., Dec. '75).

16. Authorized the Committee on Indian Affairs to use $1500 of unspent funds received from the Ittleson Family Foundation grant to publish a monograph on mental health problems of Indian youth—continuation of a project made possible by a contract with the Indian Health Service (Bd., Dec. '75).

17. Approved establishment of a Committee on the Mental Health of Spanish-Speaking People in the United States within the Council on National Affairs (in May 1976); and endorsed the suggestion to the President that, where appropriate, effort be made to appoint qualified Spanish-speaking psychiatrists to the APA component (Bd., Dec.'75).

18. Endorsed the recommendation that all minority group psychiatrists be included when consideration is given to selections for observer/consultant positions (Bd., Dec. '75).

19. Approved the Reference Committee's recommendation for establishment of a Committee on Confidentiality in the Council of National Affairs, consisting of seven members (one from each area) chosen on the basis of their experience and demonstrated knowledge in this field; and authorized $2500 for its support (Bd., Dec. '75).

20. Reconstituted the Commission on Drug Abuse to permit continuation of its work until May 1976 (its normal termination date), during which time recommendations will be developed by the Council on Research and Development for entities dealing with enduring functions of the Commission (Bd., Apr. '75).

21. Strongly supported the Reference Committee recommendation that the Council on Research and Development, in collaboration with the Medical Director, be authorized to seek outside funds (about $30,000) to support survey activities of the Task Force on Electroconvulsive Therapy, in view of the present crisis over ECT (Bd., Dec. '75).

ELECTIONS AND TERMS

1. Authorized future APA elections to be conducted within the guidelines of systematic rotation of names of candidates within each office on a single (vertical, for ease of coding), ballot type, as recommended by the Ad Hoc Committee on Election Procedures, inasmuch as the influence of vertical or horizontal ballots revealed no consistent pattern of outcome, but influence of name order on the ballot cannot be entirely ruled out, and inasmuch as systematic rotation of names does not involve more than a few hundred dollars in printing and mailing costs, exclusive of staff time (Ex.C., June '75).

2. Approved having the newly adopted policy of systematic rotation of names on the ballots incorporated into the APA *Operations Manual* (Ex.C., Sept. '75).

3. Approved the recommendation of the Ad Hoc Committee on Election Procedures for continued use of the unidentifiable ballot, until there is a report expressing the sentiment of the Assembly on the issue (Ex.C., Sept. '75).

4. Approved two recommendations of the Ad Hoc Committee on Election Procedures: that APA continue the procedure of not supplying postage paid return envelopes for ballots; and that the return envelope be preprinted with the APA address in the upper left corner (Ex.C., Sept. '75).

5. In a mail ballot of the Board of Trustees, regarding the eligibility of Dr. Jack A. Wolford to succeed himself as Vice-President (Chapter Four, Section 7, of the Constitution and By-Laws), the majority favored the interpretation that as he had been elected to a partial term in a year when policy regarding length of term was changed, he was eligible for election to a full two-year term as Vice-President of APA (Ex.C., Sept. '75).

6. In order to minimize prejudicing the votes, adopted the recommendation of the Ad Hoc Committee on Election Procedures that the names of officers appearing on official stationery be blocked out on the covering letter for the ballot, which will be signed by the President of APA, because he cannot succeed himself and is not likely to run for any other office (Ex.C, Sept. '75).

7. Approved the recommendation of the Ad Hoc Committee on Election Procedures for regular publication in *Psychiatric News* of information stating that district branch membership is required for membership in the American Psychiatric Association and that at-large members are not eligible to vote in local or area trustee elections (Ex.C., Sept. '75).

8. Authorized analysis and publication in the *American Journal of Psychiatry* of data from the 1974 election ballots (voting patterns of groups, defined by sex, member class, age, length of membership, and Board certification status)—after assurance that individual identification of voters is not possible and not at issue (Ex. C., Sept. '75; ratified, Bd., Dec. '75).

9. Adopted unanimously the majority recommendation of the Ad Hoc Committee on Election Procedures that any officer of the Association shall not use his/her official title or APA stationery to endorse any candidate, amendment, or referendum in connection with an APA election (Ex.C., Sept. '75).

10. Approved the recommendation of the Ad Hoc Committee on Election Procedures that a general statement on campaign financing be adopted by the Executive Committee, and approved the following guidelines: that no APA area or district branch funds or services be used for election campaigns; that only APA members or groups of members be al-

lowed to contribute financing or other resources to electioneering for nomination and election—no organization, institution, individual, or group of individuals outside the APA may contribute to any candidate; that at least one week before the election, each candidate will be expected to submit an overall statement affirming that to the best of his knowledge his campaign was conducted within the guidelines set forth in these actions; that these guidelines will become mandatory for nominations and elections referable to the year 1977. Requested their immediate publication in *Psychiatric News*, strongly urging concurrence by all candidates in the election for the current year (Ex.C., Sept. '75).

11. Verified two petitions concerning the American Board of Psychiatry and Neurology, Inc., for the 1976 balloting, and ratified the Executive Committee's acceptance of the Board's statement on the ballot (Bd., Feb. '76).

12. In answer to three complaints alleging that persons had violated the guidelines for campaigning in the 1976 APA elections, authorized the Medical Director to write to remind them that use of district branch stationery or envelopes is a violation of procedures described in the APA *Operations Manual*; and specified further that the current guidelines should be sent to all candidates routinely and publicized in *Psychiatric News* (Bd., Feb. '76).

FISCAL MATTERS

1. Approved raising the APA contribution to the National Coalition for Health Funding from $1000 to $2000, for one year, in response to the new funding formula by this coalition, but asked for investigation before another year, to be sure the Association is getting its money's worth (Ex.C., Apr. '75).

2. Approved increased funding from $.50 to $1.00 per voting member for the Council of Medical Specialty Societies, which raises the annual amount from $11,000 to $20,000—but asked for further discussion regarding the function, total budget of the CMSS, and APA input (Ex.C., Apr. '75).

3. Approved the Museum and Library budget presented at the December 1974 meeting of the Board, with one change: reallocating the $20,000 for a bicentennial exhibit to bring the inventory of archives up to date and to develop a permanent archive and rare book display in the Museum area (Bd., May '75).

4. Asked the Budget Committee to study the mechanism for funding the Museum, and in the meantime approved retaining the present loan mechanism for fiscal year 1975–1976; authorized a loan of $196,934 from APA to the American Psychiatric Museum Association (Bd., May '75).

5. Approved a plan of financing the operation of the APMA through grant awards (instead of loans as before) retroactive to April 1, 1975 (Ex.C., Sept. '75).

6. Approved changing the APA fiscal year to the calendar year, effective on January 1, 1977—subject to approval by the Internal Revenue Service—and approved the budgetary arrangements suggested to achieve the changeover when approved.

7. Approved payment of an additional $500 to the National Association for Mental Health, toward settlement of the outstanding balance of the attorney's fee for Mr. Wagshal in the impoundment suit that resulted in the release of $126 million for mental health research and training and for alcoholism programs (Ex.C., Sept. '75).

8. Approved a proposed increase in subscription rates for the *Hospital & Community Psychiatry* journal effective January 1, 1977: foreign, from $15 to $18; domestic, from $12 to $15; and approved the special reciprocity rate to members of the American Psychological Association (Ex.C., Sept. '75).

9. Approved borrowing $100,000 for an advance to launch the VI World Congress of Psychiatry, the money to be used to cover past and future expenses in the planning and development of the Congress, with the proviso that the WPA agree in advance of the loan to reimburse APA for all expenditures, plus interest (Ex.C., Sept. '75).

10. Approved a Joint Meeting with the Caribbean Psychiatric Association and the Puerto Rican Medical Association Section on Psychiatry and Neurology in San Juan, Puerto Rico, following the May 10–14 Miami meeting, and authorized advancement of seed money in the amount of $2500 (Ex.C., Sept. '75).

11. Approved the staff recommendation for an 11% rise in fees for the Psychiatric Knowledge and Skills Self-Assessment Program III: residents, $20; members, $35; nonmembers, $50. Approved contracting with the Educational Testing Service to provide complete marketing and distribution services of PKSAP-III at an estimated cost of $16,355 (money to be loaned and recouped from sales); and authorized carry-over of budget funds from fiscal year 1975–1976 to 1976–1977, as the bulk of the expenses will come due during the latter part of 1976 (Bd., Dec. '75).

12. Approved a 50% rise in APA dues in most categories of membership (with an extra rate of increase for Associate Members, as recommended by the Budget Committee), with the specific understanding that the expected overage created in the 1976–1977 fiscal year will go into reserves as an act of prudence, and not be available for expanded programs (Bd., Dec. '75).

13. Endorsed the Budget Committee's recommendation for a 5% cost-of-living increase to APA employees, retroactive to October 1, 1975, in keeping with the recent federal government increase (Bd., Dec. '75).

14. Approved adoption of the following schedule of registration fees for the annual meeting: students, $15; nonmembers, $60; nonmember spouses, $10; foreign visitors, $20; one day, $15 (Bd., Dec. '75).

15. Approved the entire budget for fiscal year 1976–1977 (Bd., Dec. '75).

16. Approved a policy that spending shall not exceed estimated available revenues without the approval of a two-thirds vote of the governing body—as a reminder that programs are being approved for which funding is not available except through reserves (Bd., Dec. '75).

INSURANCE

1. Approved the tax-deferred annuity program formal plan "as an accommodation to and for the benefit of those of its members who are eligible to participate . . . in accordance with the provisions of Section 403(b) of the Internal Revenue Code of 1954, as amended" (Bd., Apr. '75).

2. Approved the recommendations of the Committee on Member Insurance and the Reference Committee that: rates for professional liability insurance for APA members be changed in accordance with the submitted schedule; that filings for the states of California, Florida, New York, and Ohio be delayed until after January 1, 1976; and that a study be made of actuarial problems where serious rate difficulties exist between different companies in the same state (Bd., Dec. '75).

3. Approved dissolution of the Retirement Plan Trust, and

authorized the trustees of the APA retirement plans to transfer the appropriate functions of that trust to a corporate trustee (e.g., a bank) or other appropriate investment custodian—with the understanding that the Retirement Plan Trustees will present a detailed proposal for final approval at a later date; and noted that these actions will in no way jeopardize existing member pension benefits (Bd., Dec. '75).

4. Approved one-year funding for a Task Force To Study Problems in Obtaining Insurance for People with Previous Psychiatric History (to be established as a subordinate unit of the Committee on Member Insurance) to consider such problems and possible solutions, as a trial-run review committee function for APA members (Bd., Dec. '75).

5. Ratified an emergency action taken by the President to approve and execute a contract between the APA Retirement Plan Trust, executed for the Association by the Trustees of the Trust and APA, and Deferred Compensation Plans, Inc., and its wholly owned subsidiary, DCP Administrations, D.C. Corporations, to act as administrators of the Trust under the terms and conditions provided for in the contract (Bd., Feb. '76).

LEGAL MATTERS

1. Accepted the recommendation of the Chairman of the Commission on Judicial Action that it is not feasible for APA to form its own malpractice insurance company, but to move toward getting a better agreement with APA's insurance carrier (Bd., May '75).

2. Authorized the Chairman of the Commission on Judicial Action to pursue negotiations—if the law firm and the Washington Psychiatric Society can get together on a pro bono brief in the St. Elizabeths case, APA will add its name to the brief as amicus curiae (Bd., Apr. '75).

3. Concurred with the recommendation of the Commission on Judicial Action that the National Organization of Women in Kentucky may cite APA's strong public position on the rights of homosexuals but that the Association does not have the resources to pursue such litigation all over the country (Ex.C., June '75).

4. Gave no official endorsement either to CHAMPUS or the American Association of Marriage and Family Counselors, Inc., in their litigation arising from termination of CHAMPUS payments to marriage and family counselors, but favored issuing a general statement that while APA does not wish to set limitations on who provides treatment, the Association is aware that it is not possible realistically to fund all services that are potentially health related, including services that may be considered under the rubric of primary prevention (Ex.C., June '75).

LEGISLATIVE MATTERS

1. Empowered the Medical Director to engage a highly skilled person to assist in writing regulations and following up on all aspects of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641) in the most effective way possible to the interests of psychiatry; authorized $15,000 now to hire a full-time person to monitor and have input into the regulations and report back to the Board and the field on the implications of what is being developed (Ex.C., June '75).

2. Approved a change in title to redesignate the Joint Commission on Legislation as the Joint Commission on Government Relations, to align its title with the staff division related to it; and noted that this did not indicate any change in function or power; approved the Commission's suggestion (for a trial period of three years) that each state have at least one legislative representative—with particular reference to the Intermountain, North Pacific, and Nebraska-South Dakota District Branches—an additional five legislative representatives; asked that appointments be made in time for attendance at the next Institute on Government Operations in March 1976; and authorized $5000 to cover the additional expense involved (Ex.C., Sept. '75).

3. Approved the Reference Committee's recommendation that the Joint Commission on Government Relations pursue communication about matters pertinent to the Executive and Legislative branches of the federal government (Bd., Dec. '75).

4. Endorsed the suggestion of the Commission on Judicial Action that the district branches appoint appropriate members to district branch commissions whose function would be to consider local branch participation in litigation affecting the practice of psychiatry in that district; to serve as intermediaries with the national Commission; and to set up liaison with the local branch of the bar association (Bd., Dec. '75).

5. Endorsed the decision of the Commission on Judicial Action to urge the Northern Texas Chapter of the Texas District Branch not to use the Wyatt Standard, as not being good enough; and the further suggestion of the Commission that in terms of individual patients and their individual rights, the court should consider a review scheme or appeal scheme such as an ombudsman, and that the court be informed by the Texas District Branch of the dangers of precipitous deinstitutionalization (Bd., Dec. '75).

6. Asked the Speaker and the President-Elect to consult with the Assembly and the Reference Committee as to a separately funded emergency psychiatric litigation fund and as to how such a fund might be developed outside the APA budgetary structure (Bd., Dec. '75).

LIAISON WITH OTHER ORGANIZATIONS

1. Approved inviting APA representatives to the American Board of Psychiatry & Neurology, Inc., to suggest a method for periodic (i.e., annual or semiannual) consultation with the Board of Trustees on important matters of policy; asked that subsequent candidates for appointment be informed of this consultation obligation; and asked that the gist ot the discussion be sent to the ABPN with the suggestion that they consider methods for inviting other psychiatrist members of the ABPN to participate (Bd., Apr. '75).

2. Adopted a plan for securing nominations for Directors of the ABPN in which staff will write letters to each of the candidates to ask if the candidate will serve if nominated and elected, if the candidate is a member of the American Medical Association, for a brief statement of the candidate's own views on current decisions by the ABPN (such as recertification, internship, etc), and for biographical data, limited to five items (Bd., Apr. '75).

3. By mail ballot, selected Donald G. Langsley, M.D., as APA's nominee for the Association's appointment to the ABPN; selected three members whose names were submitted to the AMA Section Council on Psychiatry for deliberation and forwarding of the final nomination to the chairperson of the AMA Board of Trustees for selection (Ex.C., June '75).

4. Asked the Council on Medical Education and Career Development to study the structural makeup of the ABPN and their involvement in certification and recertification issues, both for later consideration by the Board of Trustees (Ex.C., Sept. '75).

5. Approved recommended procedures for selection and for nomination of APA nominees to the ABPN by an open process that should more closely meet the various professional interests of the membership and recommended that the steps of the process be published annually in *Psychiatric News*, together with adequate information for the education of the membership (Bd., Dec. '75).

6. Endorsed the Reference Committee's recommendation that APA should request the ABPN to create a firm policy that will increase the potential for reciprocity in training for psychiatrists and neurologists (Bd., Dec. '75).

7. Endorsed the Reference Committee's approval to the ABPN for its position regarding allowing credit for British training of candidates for the Board examinations (Bd., Dec. '75).

8. Approved transmittal to the ABPN of the Assembly resolution that graduate psychiatric education be expanded to include responsibility for the clinical care of medically ill patients, as part of graduate psychiatric training leading toward certification by the ABPN (Ex.C., June '75).

9. Endorsed the Reference Committee's recommendation that APA reiterate its belief that this Association should not be a certifying organization, and that the ABPN again be asked to examine candidates for certification in Administrative Psychiatry, on the grounds that they are the best agency to do the job (Ex.C., June '75).

10. Endorsed the Reference Committee recommendation that APA representatives to appropriate bodies (such as the Council of Medical Specialty Societies and others) further explore ways to implement a uniform policy of involvement for the first postgraduate year programs of psychiatric residency training centers (Bd., Dec. '75).

11. Notified the chairperson of the American Psychological Association's Committee on Health Insurance that APA had already discontinued, in advertising the new APA *Psychiatric Glossary*, any specific reference to the definition of medical psychotherapy, that this definition is without any intent to circumscribe psychotherapeutic treatment by other licensed health professionals; and that before the next printing, the definitions of psychotherapy and medical psychotherapy will be reconsidered, taking into consideration the sense of the Executive Committee's discussion as to respective professional roles (Ex.C., Sept. '75).

12. Emphasized the need for each district branch to look at its state or states' Medical Practice Act(s) with a view to needed amendments in the light of licensing of psychologists and others; requested the American Psychological Association, in turn, to ask its local affiliates to note how their local acts may in some way actually or potentially threaten the practice of psychiatry (Ex.C., Sept. '75).

13. Requested the Medical Director to meet with the Executive Director of the American Psychological Association to explore the issues that might be discussed between the two organizations, and to suggest the composition and function of a new ad hoc committee of the two APAs that might work out answers to a series of specific problems affecting relationships between the two Associations (Ex.C., Feb. '76).

14. Deferred making a decision on extending membership on the Joint Commission on Accreditation of Hospital's Accreditation Council for Psychiatric Facilities to the Coalition for Alcoholism Program Accreditation (composed of four nonmedical alcoholism groups) until staff could gather further information (Ex.C., Sept. '75); invited the three APA Councillors and the Program Director of the Accreditation Council to meet with the Board to discuss why they are interested in joining, what the long-range implications of their admission would be, an overview of the decision making process, and anything else that might be helpful (Bd., Dec. '75); voted to admit the Coalition for Alcoholism Program Accreditation to the JCAH Accreditation Council for Psychiatric Facilities (Bd., Feb. '76).

15. Noting that the new name, although cumbersome, has the advantage of being more descriptive of the programs requesting accreditation, approved a name change from Accreditation Council for Facilities for the Mentally Retarded to JCAH Accreditation Council for Services for Mental Retarded and Other Developmentally Disabled Persons (Bd., Feb. '76).

16. Approved reducing the number of members on the APA Committee in Liaison with the American Hospital Association from six persons to four, in order to keep APA's committee membership in balance with the reduced AHA committee, and noted that this can be accomplished by attrition, with two persons rotating off in 1976 (Ex.C., Sept. '75).

17. Considered issues that the Trustees of the Association would like to have studied as the Public Corporation for Mental Health begins to identify problems affecting the interests of APA and that are germane to the charge of the Public Corporation; and encouraged the President, in consultation with the Medical Director, to move implementation in a way that best suits their judgment (Bd., Apr. '75).

18. Approved APA's cosponsoring a session on deinstitutionalization of psychiatric patients at the November 1975 meeting of the American Public Health Association in Chicago, at no expense to APA (Ex.C., June '75).

19. Accepted the invitation of the National Council on Aging to join as one of the cosponsors in their 25th anniversary-year annual meeting at the Sheraton Park Hotel, Washington, D.C., at no expense to APA (Ex.C., June '75).

MEETINGS

1. Approved APA's cosponsorship of a Conference on Psychiatric Classification and Terminology with the University of Missouri, and authorized the Medical Director to receive the funds designated for the conference, to be held in the spring or summer of 1976 (Bd., Apr. '75).

2. Approved APA's participation in the Second Pacific Congress of Psychiatry in 1980 (probably in Honolulu) at no expense to APA (Ex.C., June '75).

3. Endorsed the Reference Committee's recommendation that APA cosponsor the Congress of the World Federation of Mental Health in Vancouver, B.C., Canada, in 1977, with the proviso that this meets with the approval of the VI World Congress Organization Committee, because of concern that it might affect attendance at the Honolulu Congress, Aug. 28–Sept. 3, 1977 (Bd., Dec. '75).

4. Approved holding a conference conjointly with the Institute of Society, Ethics, and the Life Sciences to discuss role conflicts between institutional and individual therapeutic roles of psychiatrists—probably to be held late in 1976 or early in 1977—and authorized a search for outside funding (Bd., Dec. '75).

5. Authorized appointment of an Ad Hoc Committee To Plan a Conference on the Care of the Chronic Mental

Patient, which will be supported in part by the Presidential Fund of Dr. Spiegel (Bd., Feb. '76).

6. After notice of unavailability of rooms for the 1976 annual meeting scheduled for Atlantic City, gave the Meeting Management staff a 1-2-3 priority of Miami, San Francisco, Chicago (Ex.C., June '75); approved rescheduling the meeting in Miami Beach, Fla., as recommended by Meeting Management staff (Ex.C., Sept. '75).

7. Approved Atlanta, Ga., as the site of the 1978 APA annual meeting (Ex.C., Sept. '75).

8. Rescinded the Executive Committee directive of June 1967 that the *American Journal of Psychiatry* print in its March issue the preliminary program of APA annual meetings; approved publication of the preliminary program exclusively in *Psychiatric News*, with a more manageable format (Ex.C., Sept. '75).

9. Endorsed the idea of a postmeeting in Mexico City, but disapproved holding an annual meeting in that city for three principal reasons: there is no district branch there; concern for customs difficulties for attendees and exhibitors; and the fact that many state and federal employees find it difficult to secure permission and funding for out-of-the-country meetings, except for Canada (Ex.C., June '75).

10. Requested the Council on International Affairs to establish a task force to plan a joint meeting with French colleagues, in conjunction with the Program Committee, and also to plan hosting activities and other appropriate activities—possibly in Atlanta in 1978 or Philadelphia in 1979 (Bd., Feb. '75).

11. Authorized the Council on International Affairs to work in conjunction with the Program Committee and the Canadian Psychiatric Association to plan a joint session at the APA annual meeting in Toronto, Canada, in 1977 (Bd., Feb. '76).

MEMBERSHIP MATTERS

1. Approved the Membership Committee's recommendation for 12 reinstatements, and gave tentative approval for 13 others awaiting approval from their district branches; approved 259 recommended nominations for Fellowship in APA, 1 Distinguished Fellow—by transfer from Corresponding Fellow, 1 Honorary Fellow, 9 Corresponding Fellows, 20 Corresponding Members, 1 new General Member-at-Large, and 2 transfers from Associate to General Member—all, as recommended by the Committee on Membership (Bd., Apr. '75).

2. Asked deletion of the interpretation appearing in the Operations Manual that includes the requirement that those Inactive Members and Fellows applying to be excused from paying dues shall have been members for at least 10 years (Bd., Apr. '75).

3. Approved the Membership Committee's recommendation that Members-in-Training who are ineligible for other categories of membership (Associate and/or General Member) be dropped from the APA rolls after five years (Bd., Apr. '75).

4. Approved the interpretation of the Parliamentarian, agreed to by the Membership Committee, that the exemption in Chapter One, Section 5, of the By-Laws (". . . or governmental position that does not require a license") shall include those who work in state hospitals that do not require a license (Bd., Apr. '75).

5. Approved the Membership Committee's recommendation that the policy of requiring Corresponding Fellows and Corresponding Members to bear the cost of the Association's periodicals and mailings not be retroactive and that it apply only to Corresponding Fellows elected in 1974 and thereafter, but asked the Committee on Membership to look into this issue to study the consequences of extending the policy to those elected prior to 1974 (Bd., Apr. '75).

6. Concurred with the interpretation of the Membership Committee and the Parliamentarian that members of APA before 1963 who later joined a district branch could appeal to the Assembly through the Recorder on whether they may legally return to membership-at-large status (Bd., Apr. '75).

7. Received the ruling of APA legal counsel that it is not illegal to require membership in a district branch that does not have the same tax-exempt status as the parent organization, and that members who joined a district branch subsequent to enactment of the 1963 constitutional provision that requires all APA members to belong to a district branch cannot resign from a district branch and remain a member of the national Association; expressed without formal action the hope that any district branch with this question before it would hold in abeyance any action to force any resignation or drop any member who takes issue in one of these areas until it could be decided (Bd., Apr. '75).

8. Adopted the following interpretation of the relevant portions of the Constitution and By-Laws; that members who joined APA prior to May 1964 or members who were directly enrolled in APA at a later time (i.e., who did not join through a district branch, but who subsequently joined a district branch) thereby forfeited the right of at-large membership in the Association and must remain a member in good standing of the district branch in order to retain APA membership (Ex.C., Sept. '75).

9. Accepted the policy stated by the Assembly that no district branch shall admit to membership a psychiatrist who has previously been a member of another district branch, except with the approval of the previous district branch as indicated on the usual transfer form, and that the dues obligation of a member no longer within the jurisdiction of a given branch shall be limited to the dues year during which he moved from the jurisdiction of that branch, plus any dues and assessments owed for all years before he left the jurisdiction of that branch; encouraged district branches to take prompt action on any members in arrears and to notify APA of all their formal membership actions (Bd., Dec. '75).

10. Concurred with the Assembly in approving the Committee recommendation that retired Life Fellows, Life Members, and Inactive Members should have the option of maintaining membership in the district branch where they were professionally active and not be forced to transfer to the district branch of their place of residence (Bd., Dec. '75).

11. Concurred with the Assembly in approval of the recommended procedure for admitting members: when a psychiatrist has been approved for membership in a district branch and in the national Association, the individual will be simultaneously enrolled in both on the first day of the month following the date the approved application is received in the Central Office; and asked that this information be included in the APA *Operations Manual* and the Procedural Code (Bd., Dec. '75).

12. Authorized the Medical Director to seek outside funding to support (with no expense to the APA) a study of the distribution of psychiatrists, relative to population and urban-rural dimensions, in order to supply information for a number of purposes, including input into legislative proposals and backup for a grant submission on continuing education for rural psychiatrists (Bd., Dec. '75).

13. Asked for another legal opinion to ascertain the legality of requesting present Life Members and Life Fellows to pay dues after 30 years of membership; placed a limit of $1000 on the cost of seeking such an opinion; asked appropriate units of the APA to study the presentation of a new by-law to become effective in fiscal year 1978 "that new members of the APA continue to pay dues until they are 70 years old or upon retirement from active practice"(Bd., Feb. '76).

POSITION STATEMENTS AND RESOLUTIONS

1. Requested staff to contact the consulate and embassy to ascertain the extent of Israel's exclusion from UNESCO (Bd., Apr. '75); approved the recommendation that APA join with other associations and respond positively by sending a protest to UNESCO—speaking to the issue that political exclusions have begun to destroy UNESCO and will do so if political decisions are allowed to interfere with international education and scientific and cultural activities (Bd., May '75).

2. Approved publication of the Report of the Task Force on Right to Treatment as a position statement of the APA (Ex.C., June '75).

3. Approved publication of the Report of the Task Force on Lithium Therapy in an early issue of the *American Journal of Psychiatry* (Ex.C., June '75).

4. Approved the recommendation that APA submit to the President's Panel on Research a position paper delineating the psychiatric issues for their consideration—including policies, postures, and concerns of the APA; asked staff to prepare such a paper (Ex.C. June '75).

5. Ratified a telephone vote of the Executive Committee, which approved the proposed position statement on Public Law 93-641, regarding Health Systems Agencies, and asked that throughout the document mental health should be stressed in addition to physical health (Bd., Dec. '75).

6. Approved the recommendation that in those instances wherein reference is made to "black psychiatrist" and "black research workers" in the "Position Statement on the Training of Minority Psychiatrists" (authorized May 1971), the word "minority" should be substituted for "black" (Bd., Dec. '75).

7. Approved the recommendation that the word "public" be dropped from the APA Position Statement on Desegregation of Public Mental Hospitals for the Mentally Ill and Retarded" (authorized December 1963) wherever it applies to hospitals or services (Bd., Dec. '75).

8. Because of the high interest at this time, approved APA's publication of *The Rape Victim*, with the understanding that it would be extensively edited and that the authors would consult with APA legal counsel about the wording (Bd., Dec. '75).

9. Approved in principle the suggested position and report of the Task Force on Ecopsychiatric Data Base and the Council, on fostering conditions and opportunities for each individual to achieve a satisfactory level of life within the individual's cultural and societal context—but asked for suitable editing and simplification before publication (Bd., Dec. '75).

10. Approved the revised, shortened version of the present position statement of the Council on Mental Health Services on Organizational Structure of State Mental Health Programs to make it more current and more useful to the district branches and to the members of the Association (Bd., Dec. '75).

11. Approved the positions expressed by the Council on Mental Health Services as to the different administrative responsibilities of nonmedical administrators and psychiatrists with provision of a procedure for resolving conflicts within institutions where such a pattern may exist; requested appropriate changes in future printings of *Standards for Psychiatric Facilities* (Bd., Dec. '75).

12. Approved and asked for distribution to the Secretary-General of the United Nations, to colleagues in medicine, the behavioral and social sciences, and in the other learned professions of "a position statement by the American Psychiatric Association protesting the resolution of the United Nations General Assembly which holds that Zionism is a form of racism and racial discrimination and dissociating the American Psychiatric Association from further participation in the United Nations 'Decade of Action against Racism and Racial Discrimination' until the resolution is withdrawn" (Bd., Dec. '75).

13. Approved the report of the Committee on Financing Mental Health Care, as modified and approved by the Assembly Executive Committee, as a position statement of APA on the condition that further review may result in altering the language in Section Two, part 3, to read, "Services should include (rather than be limited to) diagnosis and treatment," as being broader language allowing for greater range (Bd., Feb. '76).

14. Approved the "Guidelines for Continuing Education" as a working document, subject to final revision (Bd., Feb. '76).

JULES MASSERMAN, M.D.

Report of the Treasurer

GENERAL: This report is prepared from audited figures for the fiscal year that ended March 31, 1976. Data presented here also appear in the auditor's annual report.

Attached hereto is a statement of financial condition (table 1), and "pie" charts (figures 1 and 2) reflecting revenues earned and functional costs for the fiscal year. This report, together with the statement and charts, will provide the membership with the information they need to assess the operation and financial condition of the Association.

INCOME AND EXPENDITURES: Income and expenditures were budgeted at $4,540,036 for the fiscal year. Income received totalled $4,449,683 or $90,353 under the budgeted amount. Expenditures were $4,772,872 or $232,836 over the budgeted amount.

Income was affected to some degree by recessionary pressures during most of the fiscal year. Short-term investment income was substantially reduced because of the improvement in the money market that caused interest rates to fall to about half those of the previous year. No new grants or contracts were negotiated during the fiscal year.

Expenditures were adversely affected by the inflation that still ravages the economy. Pressures for increased expenditures stemmed from virtually every activity of the Association and prompted strict economy measures.

Operations of the Board of Trustees, the Councils, and the Assembly accounted for 18.4% of the expenditures. This represented a decrease of 4.3% against similar expenditures in the prior fiscal year.

Public Affairs programs required 4.5% of the expenditures, a decrease of slightly less than 1%. Administrative costs amounted to 9.6%, or an increase of 1.6%. Member services accounted for 23.2% of the budget, an increase of .8% over the prior year.

INVESTMENTS: At the suggestion of the Deputy Director for Business Administration, I established the APA Investment Advisory Committee in October 1975. The committee is comprised of eminent financiers in the Washington, D.C., area having expertise in both the money and capital markets. The committee has accepted responsibility for monitoring the APA portfolio (ranging from approximately $2,000,000 to $3,000,000 throughout the year), making recommendations to the Treasurer about sales and purchases of securities, and recommending plans for future investment activities. Based on a recommendation of the committee, the equities portion of the portfolio (approximately $400,000) was transferred from Merrill Lynch to American Security Bank. The remainder of the portfolio (ranging from about $1,600,000 to $2,600,000 throughout the year) is managed directly by the committee. The prime consideration of the committee was the improvement of the quality and diversification of the portfolio holdings. APA realized losses of $101,450 incurred because of earlier declines in the stock market, primarily during 1973 and 1974. It was believed that the fundamental outlook for the stocks of these companies was not sufficiently attractive to warrant their retention.

The return on short-term investments such as commercial paper, certificates of deposit, etc., decreased steadily during the year—from about 8% to the present 5%. Because of this decline in return, it is now more prudent to invest in U.S. Treasury bills and notes than in commercial paper. As of the year end, short-term investments were almost completely in government obligations.

As of April 1, 1976, the APA portfolio (at market value) consists of $600,000 in short-term bonds, $1,795,388 in Treasury bills, $320,000 in savings and loan accounts, and $424,500 in common stocks (17 issues).

The policy of the Association is to employ sound investment vehicles affording the maximum return consonant with safety of capital, i.e., the type of investment a prudent individual would seek. It would appear that the Association's investable funds are now in such securities.

PUBLICATIONS: *Psychiatric News* exceeded budget estimates for income by $5,338. Income had been projected as $711,295, whereas $716,632 was realized. Expenses were budgeted at $719,221, but only $685,426 was expended. *Psychiatric News* operated at a profit of $31,207.

The *American Journal of Psychiatry* produced $780,044 of income but was budgeted to receive only $732,500. Thus, budgeted income was exceeded by $47,544. Expenses of the *Journal* were budgeted at $785,871; however, $790,874 was incurred, or an overexpenditure of $5,003. Instead of the projected deficit of $53,371, the actual deficit was only $10,830.

Hospital & Community Psychiatry operated at a deficit. Income produced was $176,039, and this was $36,961 under that budgeted. Expenses of this journal were budgeted at $367,648; however, only $350,930 was expended.

The Association maintains about 100 publications in its inventory. Of these, only 5 show an annual profit. Sales of these publications exceeded those of the previous fiscal year. In addition, sales exceeded the cost of publishing new books and reprinting others. All of the Association's publications are produced and marketed at prices that assure a return of only printing and distribution costs. The excess of sales over expenses keeps this activity self-sustaining.

The deficit resulting from operations amounted to $221,739, stemming primarily from an understandable reluctance to increase dues in recent years. While APA has gone to the membership 6 times in the past 15 years for added income (an average of one dues increase or building levy every 2½ years), the last substantial increase was six years ago, in 1970. The modest increase of 10% in 1974 did not keep up with inflationary costs and the 1974–1975 fiscal year ended in an overall deficit of $108,188. Since APA was operating at a

This is an edited version of the report presented by the Treasurer to the annual business meeting in Miami, Fla., May 11, 1976.

TABLE 1
Comparison of Fiscal Years 1975–1976 and 1974–1975

Item	1975–1976	1974–1975
ASSETS		
Cash	$ 424,057	$ 3,525
Certificates of deposit	320,000	320,000
Accounts receivable	386,312	487,090
Accrued interest receivable	17,041	31,057
Deferred and prepaid expenses	103,501	72,245
Marketable securities		
Stocks and bonds (at quoted market value)	1,024,500	788,316
U.S. Treasury bills, etc., short-term investments at cost	1,795,388	2,203,554
Notes and advances receivable from the American Psychiatric Museum Association, Inc.	1,757,085	1,757,085
Less		
Valuation reserve	(1,757,085)	(1,757,085)
Land and building (at nominal value)	1	1
Furniture and equipment (at nominal value)	1	1
Total assets	4,070,801	3,906,239
Deduct		
Cash and marketable securities allocated to restricted funds from general fund	366,260	553,354
Total general fund	3,704,541	3,352,885
LIABILITIES		
Accounts payable	21,724	46,890
Due to district branches	46,052	—
Deferred income		
Annual meeting, etc.	122,579	93,281
Advance dues collections (1976–1977)	1,787,393	1,222,906
Accrued expenses and salaries	42,965	25,183
Funds collected and held for Trustees of the Benjamin Rush Foundation	684	21,082
Appropriated for benefit of the American Psychiatric Museum Association, Inc.	—	93,000
Reserve for future expansion and development	1,500,000	1,500,000
Less		
Valuation reserve and marketable securities	(74,584)	(230,374)
Total liabilities	3,446,813	2,771,968
Unrestricted surplus		
At beginning of year	580,917	689,105
Net decrease during the year ended	(323,189)	(108,188)
At year end	257,728	580,917
Total general fund	3,704,541	3,352,885

deficit level of $108,188 going into the 1975–1976 fiscal year, and since expenses outstrip income by more than $120,000 per year, the source of the $221,739 deficit becomes apparent.

DUES: The dues increase for the 1976–1977 fiscal year seems to have been well received by the membership. The rate of resignations (as of March 23, 1976) is only ½ of 1%, well below the experience of other associations under similar circumstances. Surely, this favorable reception of a substantial dues increase betokens a high morale and sense of common dedication among the members.

During the year the Association had an opportunity to utilize the simultaneous dues billing concept whereby APA dues and the dues of a district branch are billed on the same invoice. The APA dues billing for 1976 included service for 17 district branches and 5 more have indicated a desire to join the system during 1976.

The advantages of the simultaneous dues billing system are 1) the saving to the branches in staticnery, postage, labor, etc., required for individual branch billing, 2) the elimination of correspondence between the branches and APA concerning members' dues paid to each organization, and 3) the elimination of many inquiries by the members themselves. APA receives a small fee representing approximately half of their expenses of billing and collecting dues for both organizations.

ECONOMY MEASURES: In response to economic constraints during the past fiscal year, numerous cost control measures were implemented including the employment of a Deputy Director for Business Administration, elimination of excess expenses in programs, a ceiling on staff raises, renegotiation of publication contracts, a firm resolve that no new programs should be instituted without either the elimination of an existing program or provision for independent funding, and a self-imposed control by the Board of Trustees that the annual budget of APA shall not exceed estimated available revenues without the approval of a two-thirds majority vote of the governing body. Savings in contract renegotiations alone amounted to an estimated $78,000 per year.

In addition, every effort was made to identify new sources of revenue. Rate schedules were increased for display and classified advertising, charges were instituted for use of copyrighted material except for APA members and educators, reprint schedules were increased, and subscription and service rates were elevated. These rate revisions should bring in an additional $112,000 each year to APA.

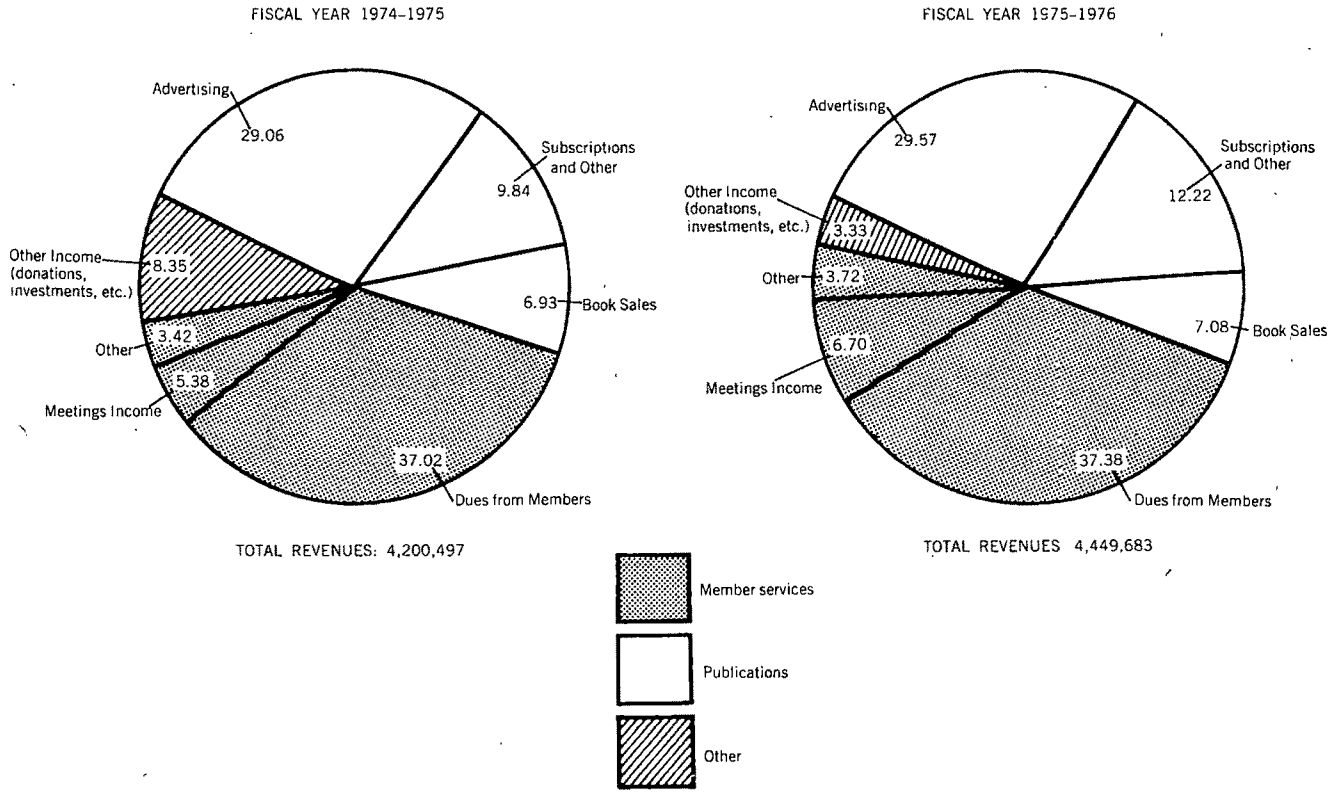
EMPLOYEE BENEFITS: APA seeks to maintain employee salaries at a level commensurate with that of the federal government. Thus, a cost-of-living increase was granted to our employees in October.

Workmen's Compensation insurance rates almost doubled from the last fiscal year. The Association's portion of Social Security taxes exceeded that budgeted by a small amount because of the increase in the base amount upon which such taxes are calculated. The base was increased $900 on January 1 by the federal government, and this affected budget estimates during the first quarter of 1976.

BUILDING OPERATION AND MAINTENANCE: Expenses exceeded budget estimates by $11,415. Of this amount, the costs recorded for telephone service exceeded budget estimates by $8,833, reflecting the growing need for quick communication. Water costs exceeded the budget by $457 or 182%. Other items were very close to those budgeted.

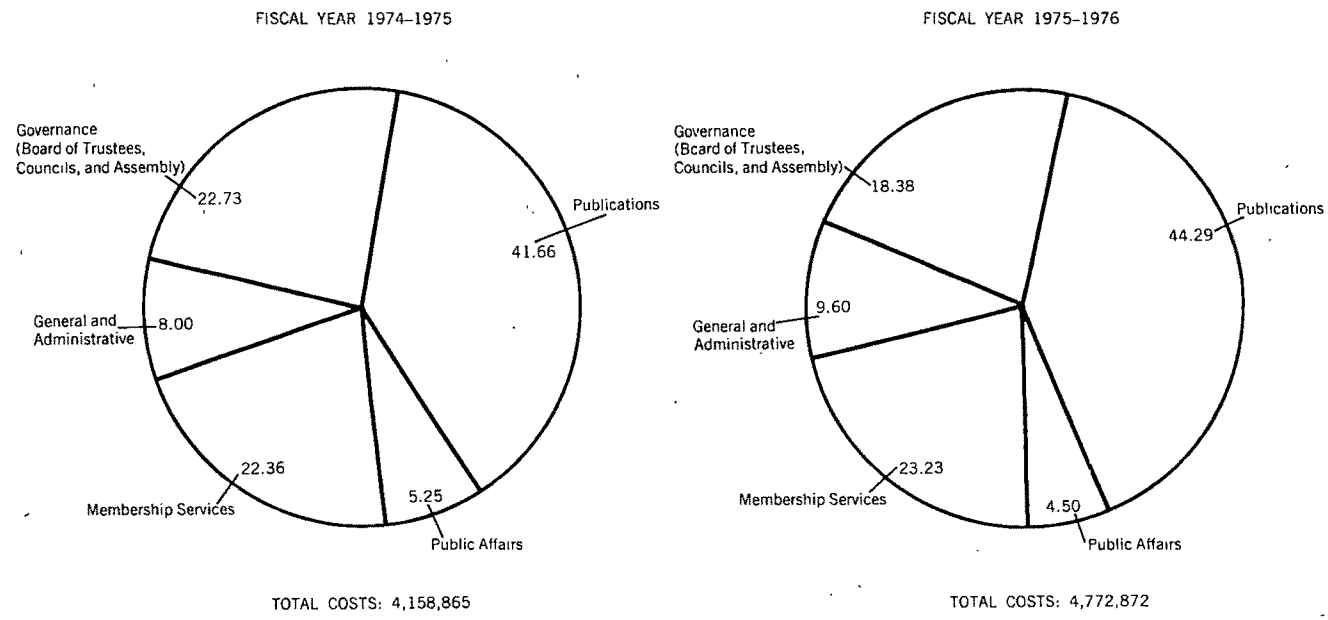
CHANGE IN FISCAL YEAR: In June 1975, the Executive Committee voted to change the APA's fiscal year from April 1–March 31 to January 1–December 31, effective January 1, 1977, subject to approval by the Internal Revenue Service. Adoption of the proposed fiscal year would allow adequate time for the auditors to prepare their report for presentation by the Treasurer during the annual meeting, coincide with

FIGURE 1
Comparison of APA Revenues, in Percents*



*Each percentage point represents approximately $41,000.

FIGURE 2
Comparison of APA Cost, in Percents*



*Each percentage point represents approximately $41,000.

the APA's dues-billing period, and conform with the fiscal years of vendors and professional organizations with which APA should compare data.

The details of the total, audited figures for expenses and income are available to the membership for inspection at APA headquarters.

In presenting this third annual report as your Treasurer, I wish to express my sincere appreciation to the Assembly of District Branches, to the Board of Trustees, and to the officers for their continuing and wholehearted support. The same sincere appreciation is due the Medical Director, the Deputy Director for Business Administration, the Comptroller, and the entire staff for their gracious and capable assistance in all matters that I have brought to them during the course of the year.

JACK WEINBERG, M.D.

Report of the Medical Director

THE PAST YEAR has been an extremely active period during which the Association has been engaged simultaneously in considering potential reorganization and coping with a large number of current internal and external issues. Your staff has the task of enabling the decision-making process so that it proceeds as smoothly as possible and the responsibility of implementing decisions that fall within its purview.

I am pleased to report to you that the staff has performed these tasks assiduously, effectively, and with extraordinary devotion. Every effort has been made to economize and to carry out staff responsibilities in a cost-efficient manner. Under the general leadership of the Treasurer and the day-to-day supervision of the Deputy Director for Business Administration, Dr. Jack White, a number of economy moves have saved our members many thousands of dollars. A sizeable dues increase was approved by the Budget Committee and the Board after a report on the fiscal status to the Assembly. The cumulative impact of inflation, recession, the assumption of several new programs, and the lack of recent dues increases necessitated this action. The Assembly, the Board, and the staff are mindful of the need for careful accountability in carrying out all of our respective responsibilities.

The American Psychiatric Association has a broad network of transactions with a large number of associated organizations and institutions. These relationships require consistent reinforcing and reevaluation. In an attempt to consolidate our position and strengthen liaison and communication with our friends in a variety of organizations, my staff and I have met with many groups, including the American Association of Directors of Psychiatric Residency Training, the American Board of Psychiatry and Neurology, the American Association of Chairmen of Departments of Psychiatry, the Liaison Group on Mental Health, the Council of Medical Specialty Societies, the American Hospital Association, the American College of Physicians, the American Bar Association, and the American Medical Association, among others.

One of the major efforts of staff during the past year has been increased and better communication with members. In an attempt to define and delineate how the staff can better assist the membership, the Deputy Medical Directors and I have traveled to many different parts of the country to keep in touch with the opinions of psychiatrist-members. The staff considers this contact with the district branches an important responsibility. Improved service and communication was of prime concern when changes were made in staff functions, and further changes may be necessary to deal realistically with the functional organization of the Association and the accelerated activity of newly organized programs.

Dr. Peter Martin and the Program Committee planned a new program activity for the annual meeting—courses in continuing education. All courses were not only "sold out" but oversubscribed, which emphasizes the demand for this kind of educational experience. We hope that this program will continue to grow as APA takes active leadership in the field of continuing education for psychiatrists.

I have prepared a detailed report with information concerning each of the APA divisions and departments, which is available to any member who requests a copy. I will now briefly call your attention to some new activities.

PUBLIC AFFAIRS

Robert L. Robinson has taken primary responsibility for organizing the new National Commission on Confidentiality of Health Records, Inc. Some 18 national organizations have agreed to become charter members; articles of incorporation have been processed in the District of Columbia. By-Laws have been agreed upon, and Dr. Alfred M. Freedman, past President of APA, has been named president of the new commission.

Mr. Robinson and his division also administered the Conference on Education of Psychiatrists, held in June 1975, and they are presently preparing a substantive report of the meeting and a volume of the working papers, which will be available in late 1976.

We are currently seeking an Assistant to the Director of Public Affairs, whose responsibilities will include staff functions for the new Joint Commission on Public Affairs.

In addition to preparing press releases, arranging interviews, and responding to articles in the public press, this division editorially processed two new task force reports, "Confidentiality and Third Parties," and "Psychiatric Services to Religious Institutions," and one new monograph, *The Rape Victim.*

WOMEN IN PSYCHIATRY, MINORITY AFFAIRS, AND CHILD PSYCHIATRY

Dr. Jeanne Spurlock, Deputy Medical Director, serves as coordinator for activities related to child psychiatry, women, and minority groups. An evaluation of the Minority Group Psychiatry Training Program Fellows is being conducted by assessment of several data sources, including reports on trainees by their supervisors, trainees' evaluations of their programs, and training directors' input concerning the impact of the minority project on their training programs.

Dr. Spurlock continues to broaden her activities, both internal and external, as activities in the field increase. We are pleased to note the formation of the new Council on Children, Adolescents, and Their Families on April 1, 1976. Dr. Spurlock will serve as liaison to this council.

BUSINESS ADMINISTRATION

Dr. Jack White has been with APA for approximately a year and a half, and APA has achieved a much higher level of

This is an edited version of the report presented by the Medical Director to the annual business meeting in Miami, Fla., May 11, 1976.

fiscal responsibility and stability under his leadership. Dr. White and his staff have provided much needed information on projected costs, consulted with the Treasurer, supervised the activities of the business departments, and provided staff support to the Council on Internal Organization and the Budget Committee.

Dr. White, with approval of the Treasurer and Medical Director, established an Investment Advisory Committee last fall, comprised of three financiers from Washington, D.C., with expertise in money and capital markets. This committee has responsibility for monitoring the APA portfolio and making recommendations on sales and purchases of securities; it has provided invaluable assistance to the Treasurer.

In the budgeting process for 1976-1977, emphasis on identifying new sources of revenue and reducing expenses resulted in new printing arrangements for APA publications, at considerable savings. Also, rates charged by publications for copyright privileges, reprints, and advertising have been increased.

Dr. White supervises the following business departments: Accounting and Fiscal, Administrative Services, Meetings Management, Publications Services, and the VI World Congress of Psychiatry. Under his supervision the methodology for an APA-wide employee salary review is being completed. A systematic review and revision of salaries will be forthcoming.

Dr. White has also worked intensively on the malpractice program with the Committee on Insurance and the Joseph A. Britton Agency. APA reluctantly accepted a rate increase because we could not secure alternative means of providing an equally sound program for our members. Dr. White and his staff have attempted to answer each member's concern or complaint on an individual basis, explaining the reasons for the increases and APA's position that it cannot with confidence recommend any other malpractice program at the present time. Because of the membership's concern over the malpractice issue, the staff is deeply involved in seeking the best possible mechanism to deal with this very pressing matter.

During the past year we conducted a test run on the dues billing system. The dues year began on January 1, 1976, and 17 district branches participated in the simultaneous dues billing system. Four others will run special billings for a partial year during 1976. Thus, assuming that all on the system remain, 21 branches or more will be participating in the simultaneous dues billing system in 1977.

By the end of the fiscal year (March 31, 1976) 50% of the dues billed in January 1976 had been collected. Although a number of our members have found the increase a hardship, the overall response has reflected understanding and support of the Association's fiscal status.

Dr. White is also working on implementing the Board's action to place the APA fiscal year on a January to December basis that will parallel dues billing, which now takes place on January 1. It is anticipated that this changeover will take place in January 1977.

ADMINISTRATIVE SERVICES

Charles B. Kurta was employed as Chief of the Administrative Services Division in July 1975, replacing Rodney A. Rollo, who retired. His areas of responsibility include personnel administration (at present there are 99 permanent employees in the Central Office), office services, building maintenance, security, communications, insurance risk management, and shipping room functions. The division's responsibility for staff liaison with the membership in the area of insurance matters and retirement plans is becoming increasingly important.

During this fiscal year, the division provided service for 196 in-house meetings; it also processed some 212,231 pieces of outgoing mail, a sizeable increase over last year and a significant indicator of the Central Office work load. The volume of incoming mail has reached a peak of 1,386 pieces per day (or 382,692 during the past year), and careful attention is required to open, sort, and distribute this material correctly.

PEER REVIEW AND COMPREHENSIVE HEALTH PLANNING

Dr. Donald W. Hammersley has begun to coordinate the activities of Dr. Richard Dorsey, whose contract with APA began on April 1, 1976. Dr. Dorsey will serve as field consultant to the district branches out of the newly formed Office of Peer Review. He will visit district branches that have peer review components in the beginning stages of development, as well as those which are more experienced, in order to provide consultation services and reports that will be shared around the country.

Also under Dr. Hammersley's direction is the Office of Comprehensive Health Planning, headed by Mr. Sam Muszynski. This office was established in September 1975 so that APA might be able to respond effectively to all aspects of P.L. 93-641, the National Health Planning and Resources Development Act of 1974. A packet was prepared and sent to the district branches to explain the purposes of the act in order that states might seek appropriate inclusion of mental health components in all planning for health service agencies.

Dr. Hammersley and his staff continue their support of many other activities, and serve as liaison and secretariat to the Reference Committee, the Councils on Professions and Associations and Mental Health Services, the Commission on Standards of Practice and Third-Party Payment, the Ad Hoc Committee on Interprofessional Services, and the Falk Fellowship Program.

STAFF COORDINATION WITH THE ASSEMBLY AND DISTRICT BRANCHES

The staff continues to service and correspond with Assembly officers and related components (the 7 area councils and the 72 district branches) and to coordinate the preparation of agenda and backup material for the various meetings throughout the year. As the Assembly takes on an even more responsible and authoritative role in the affairs of the Association, the activity of this office increases. Although Dr. Henry Work, Mrs. Anne Whinnie, and other staff have done an excellent job in carrying out staff responsibilities related to the Assembly's expanded functions, it is obvious that some increase in staff will be required during this fiscal year in order to carry out the mandates of the Assembly.

PROFESSIONAL AFFAIRS AND THE OFFICE OF EDUCATION

Dr. Henry Work, in his role as Deputy Medical Director, provides leadership and consultation to a variety of activi-

ties, including the Hospital & Community Psychiatry Service, the Consultation and Evaluation Services Board, the Councils on Medical Education and Career Development and Research and Development, the APA Program Committee, the VI World Congress of Psychiatry, and the Assembly of District Branches. He also directs the current educational effort, and this year Dr. Work provided important liaison to the search committee (appointed by the Council on Medical Education) to locate a new Director of the Office of Education. It is hoped that in the coming year, as the Assembly of District Branches requires additional services from Dr. Work and staff, some of these activities might appropriately be transferred to the new Director of the Office of Education, Dr. Carolyn Robinowitz. In carrying out those responsibilities and others, Dr. Robinowitz will assume the title of Deputy Medical Director.

During the coming year there will be increased staff emphasis on the development of continuing education programs within district branches, and we anticipate that Dr. Robinowitz will be visiting many states to provide encouragement and help in this expanded activity.

A system has been instituted to distribute information to district branch continuing education personnel, beginning with a book of guidelines about the development of continuing education programs. It is hoped that the program related to the new continuing education requirements for APA membership will be operative by July 1976. The requirements essentially parallel those used by the American Medical Association for its Physician Recognition Award, and this office is working with the AMA to ensure maximum flexibility in interpretation of the category system.

Preparations for the Psychiatric Knowledge and Skills Assessment Program III have been completed. A bulletin of information has been mailed and the program schedule is as follows: program materials will be mailed to registrants on June 15; answer material is to be returned on September 10 for central scoring; and performance data will be mailed on November 15. There are some innovative aspects in the program, including a recorded patient interview for one of the patient management programs and complex multiple branching questions concerning patient management.

Dr. Howard Kern's contributions, not only to the APA continuing education program but also to the education of nonpsychiatric physicians around the country, have been numerous. The Physician Education Project has flourished under his direction, continuing education is receiving increasing support, and he leaves us with a staff capable of operating the current program and implementing innovations.

MEMBERSHIP SERVICES AND STUDIES

The Membership Division and the Manpower Division were merged during 1975 and placed under the leadership of Dr. Lee Gurel. The positive impact of this decision will become increasingly evident in improved services to members in the form of better communication. This division also conducted the 1976 balloting with meticulous care.

Of particular interest is the Census of Residents, begun in September 1975. As of April 1976 only two programs had not yet reported. Coding and processing have been difficult in view of the shift of some training programs to 4 years.

Plans are under way for a 1977 *APA Membership Directory* early in that fiscal year and for what is expected to be the 1978 edition of the *Biographical Directory*, published at 5-year intervals.

MEETINGS MANAGEMENT

In addition to its responsibility for the annual meeting, the Institute on Hospital & Community Psychiatry, and many other continuing functions, this department is now involved in planning for the VI World Congress of Psychiatry and helped with planning for the Joint Caribbean Congress of Psychiatry held in Puerto Rico, May 15–18, 1976.

I would like to thank Dominic J. Deriso for his excellent management of this department over the past 6 years. Mr. Deriso will retire in July and Mrs. Kathleen Bryan will become director. Mr. Deriso has exhibited excellent judgment throughout the years in recommending sites for the annual meetings and has worked tirelessly to ensure that this department is administratively sound.

VI WORLD CONGRESS OF PSYCHIATRY

APA accepted the role as host of the VI World Congress of Psychiatry, to be held in Honolulu in August 1977. Staff headquarters are located at the APA Central Office.

First and second Congress announcements have been printed in four languages (French, Spanish, German, and English). A contract for travel arrangements has been signed with Group Travel Unlimited and a travel brochure has been prepared. Funding for the Congress has been sought and some monies have become available. In addition, it is expected that a special grant will be obtained from the Department of Commerce to help finance this activity.

A preliminary program will be available for distribution at the APA annual meeting, and the Organizing Committee, Scientific Program Committee, and the Finance Committee will meet during the annual meeting in Miami Beach.

LIBRARY

The library maintained a good level of activity, attempting to continue to provide a full range of information services to the APA Central Office and to members. An exhibit entitled "American Psychiatry, 1789-1909" opened in December 1975, and the library has received requests for copies of the exhibit materials from other mental health organizations. This exhibit represents the first major presentation of the Library/Archives.

Over 700 new books were added to the library this year, and we maintain over 225 active subscriptions to periodicals. APA was accepted as a MEDLINE Center in January 1976, and the system, which involves a computer terminal at APA connected to a data base maintained by the National Library of Medicine, is now in operation. This information retrieval service will expand the library's reference and current awareness programs.

JOINT INFORMATION SERVICE

The chairperson of the JIS Executive Committee reported to the Board of Trustees in April 1976 on activities of this division. It is gratifying to note the continuing originality and high quality of JIS publications. Two significant studies, one on private practice and the other on "indigenous" helping agencies, were published this year. The present work on a volume dealing with the needs of the elderly mentally ill promises to be similarly significant.

Mr. Raymond Glasscote and his staff are making every effort to identify sources for necessary outside funding to augment the JIS budget. They are now seeking support for studies on the current status of primary prevention in mental health. We are grateful for the continued leadership and cooperation of the National Association for Mental Health in this joint effort.

GOVERNMENT RELATIONS AND JUDICIAL ACTION

The new Joint Commission on Government Relations became operative in 1975 and has developed close ties with legislative representatives in the district branches as the legislative network gains strength, sophistication, and organizational integration.

The 5th Institute on Government Operations, held in March 1976, was successful, and the legislative representatives had a chance to develop some relationships with Senators and Congressmen from their states.

More than 50 pieces of legislation are currently being monitored and acted upon by the Division of Government Relations under the leadership of Mr. Caesar Giolito and his staff; in addition, APA testified before Congress 14 times during the past year.

This division also serves as secretariat for the Liaison Group on Mental Health (I served as chairperson during the past year). This group, composed of representatives from various organizations working in the mental health field, is currently attempting to assess whether or not it is possible to formulate a common mental health position on national health insurance.

Stanley I. Bregman, of Bregman, Abell, Solter & Kay, began serving as a part-time legal/legislative consultant to APA on January 1, 1976. His primary administrative relations are with Dr. Hammersley, but he may be called on by other staff. Mr. Bregman also continues to serve the Washington Psychiatric Society in this capacity.

Mr. Bregman's recent activities include arranging with the Republican and Democratic Platform Committees for the appearance of an APA representative and exploration of the new CHAMPUS policies on reimbursement, which has involved contact with Congressional and Department of Defense staffs.

Last year I called to your attention the work of the Commission on Judicial Action. The commission has now requested each district branch to develop its own committee to work in this area so that the work of the commission can be facilitated by contact with knowledgeable people in each state. In addition, this year we will add to the staff an attorney with expertise in mental health and the law who will work under the aegis of the commission and be responsible for writing briefs for the Association that may be filed in court cases of national concern.

PUBLICATIONS

The increase in the number of manuscripts submitted to the *American Journal of Psychiatry* has reached proportions that concern the Editor, Dr. Francis J. Braceland, and the staff. There was a 14% overall increase in calendar 1975, due mainly to a 16% increase in unsolicited (as distinguished from annual meeting) papers. This has increased the workload on staff considerably.

Among the outstanding overview and other special articles in 1975 were "Psychiatry and the Elderly" by Robert Butler, M.D., "The Madness of Art" by Leon Edel, D. Litt., and "Maintenance Therapy in Psychiatry" by John Davis, M.D.

Mrs. Evelyn Myers, Managing Editor, is also involved in activities concerning health insurance coverage of mental illness; she has continued her work on the report of the APA Committee on Financing Mental Health Care, which will be published shortly.

Under the leadership of the Editor of *Hospital & Community Psychiatry*, Dr. Donald W. Hammersley, staff has given considerable attention this year to ways of increasing income and controlling costs. We are confident that the financial picture for this journal will be considerably improved in the year ahead. Circulation now stands at 18,500, with a steady increase in individual subscribers. The staff and Editorial Board have also been diligent and creative in seeking new ways to publicize the *Hospital & Community Psychiatry* journal and to make its content even more attractive and interesting to a diverse and large group of readers.

In the context of fiscal accountability, *Psychiatric News* changed printers effective February 1976 with the hope of a 16% reduction in printing costs. Revenues continue at a high level. In March, William Byrd Press, the new printer, advised that the U.S. Postal Service office in Richmond, Va., would begin providing "preferential" treatment for *Psychiatric News* that should expedite delivery throughout the country.

From time to time, members are critical of particular reports, and occasionally *Psychiatric News* has been strongly criticized. In my judgment, however, the newspaper continues to be well received by the overwhelming majority of APA members and other readers.

PUBLICATIONS SERVICES

To provide more efficient supportive services to APA's publications, Dr. Jack White has reorganized this division. At present, all advertising in journals, circulation matters, printing, and promotion are handled by this staff. In addition, transfer of advertising, reprint, and circulation billing to accounting and *AJP* reprint permission to Publications Services is planned during 1976–1977.

It is interesting to note that advertising income for fiscal year 1975–1976 is up 12.2% over last year; subscription income is up 12.6% (due to rate increases for subscriptions).

Because of insufficient staff time, promotion activities have been necessarily limited. However, plans are being made to discuss the development and implementation of a promotion program for publications. A redesigned APA Publications List was made available in May.

CLOSING REMARKS

This has been a "key" year in the history of the Association, beginning in March 1975 with the Key Conference. In June, the staff had a "Mini-Key" Conference to discuss recommendations emanating from the Report of the Key Conference Task Group No. 5 on Staff Roles. This began a process of looking at the interfaces among various departments, potential conflicts that exist in staff activities, and the manner in which staff relates to the membership, and was followed by "diagnosis" of staff functions and activities as well as the manner in which they can best be carried out. Staff is planning other meetings to continue discussions of organiza-

tion along more functional lines. I have met with small department groups to facilitate this planning.

Staff has also been involved in the preparation and distribution of the many documents that have been produced as a result of the Key Conference: the report itself, the many reports of the Assembly Task Force on the Key Conference, the Board's Ad Hoc Committee, and the Joint Conference Committee on the Key Conference Recommendations. I am sure that most of you are aware of the many versions of the Constitution and By-Laws that have been produced and the analyses, legal opinions, and other documents that have been sent to the district branches for study.

This has been an extraordinary year—challenging, occasionally tumultuous, and educational. I am grateful to the Board of Trustees, the Reference Committee, the members of the Assembly of District Branches and its Executive Committee, the district branches, and the entire membership for their continued support and confidence in the staff.

MELVIN SABSHIN, M.D.

Report of the Speaker

THE WORK OF this past year has been directed at implementing the recommendations of the 1975 Key Conference.

NEW PROCEDURAL CODE OF THE ASSEMBLY

The Assembly's Committee on Planning and Development and the Task Force on Key Conference Recommendations proceeded with the revision of the Assembly Procedural Code. In order to make the Assembly more truly representative of the membership, provisions were made for a more broadly based nominating process and more uniform election procedures of delegates and alternate delegates (now to be known as district branch representatives and deputy representatives), including ballot distribution to every member and the possibility of recall of any elected representative. Area representatives and area deputy representatives are being limited to two consecutive terms, with reelection being permitted only after a three-year lapse. Provisions for voting, including splitting of the number of votes to which any district branch representative is entitled, were modified so that the vote could be most representative of the wishes of the members of the district branch. The functions of Assembly committees, including the Executive Committee, were clarified, emphasizing the importance of responsibility and accountability. The new Procedural Code was adopted at the November 1975 meeting of the Assembly, and area councils and district branches were enjoined to conform their respective procedural codes or by-laws to it by May 1977.

Constitutional and by-law changes were also proposed for the Association in order to shift more specific policy-making functions to the Assembly. These were eventually modified through collaboration with the Ad Hoc Committee on the Key Conference Recommendations of the Board of Trustees and subsequently collated by the Committee on Constitution and By-Laws for presentation to the membership.

ACTION PAPERS FROM DISTRICT BRANCHES AND AREA COUNCILS

Specific action was taken on many items under the following categories:

Right to Treatment

The report of the APA Task Force on the Right to Treatment was carefully reviewed, and amendments to the section dealing with the right to refuse treatment were proposed based on the Association's main concern with clarifying the existing and growing need for implementing and enlisting support for the right to treatment and on the understanding that the right to refuse treatment is legally vouchsafed and need not be part of the statement about the right to treatment.

Financing of Mental Health Care

The report of the APA Committee on Financing Mental Health Care was approved in part; the remainder was the subject of a joint meeting of that committee and the Assembly Task Force on Delivery of Mental Health Services for purposes of refining the document, stressing the feasibility of full and equal coverage of psychiatric conditions under proposed national health insurance, and reaffirming the desirability of retaining multiple models of delivery of mental health care.

Continuing Medical Education

Several actions papers were concerned with the "guidelines" as prepared by the Council on Medical Education and Career Development. Questions were considered concerning accrediting agencies, acceptable programs, date for the submission of data regarding fulfillment of continuing education requirements for continued membership in the Association, and the specific continuing education needs of psychiatrists. It was proposed that the current guidelines be used for purposes of accumulating presently needed credits, and two members of the Assembly were appointed to the Subcommittee on Continuing Education of Psychiatrists, a component of the Council of Medical Education and Career Development, for further clarification of standards and methods.

The Community Mental Health Center

The role and responsibility of psychiatrists as differentiated from other disciplines will be considered by an Assembly task force to study problems encountered in different areas by various district branches. Appropriate changes in future printings of *Standards for Psychiatric Facilities* will also be made by the Council on Mental Health Services.

Relationship Between APA and Pharmaceutical Companies

Concern with ethical considerations and financial implications resulted in the establishment by the Board of Trustees of a Task Force on Interface between Psychiatry and Industry, on which two members of the Assembly will serve.

The Chronic Psychotic Patient: A Silent Majority

The need for critical studies of current programs for new research and for coordinated efforts to obtain adequate funding, together with a recommendation by the Assembly that the establishment of a commission on a national level be considered, resulted in making this subject a priority item for the Council on Emerging Issues.

This is an edited version of the paper presented by the Speaker of the Assembly of District Branches to the annual business meeting in Miami, Fla., May 11, 1976.

Establishment of the Council on Children, Youth, and Their Families

An action paper suggesting that the former Commission on Childhood and Adolescence was inadequate to implement potential and actual APA responsibilities on behalf of young people or to make optimal use of APA's child/adolescent psychiatrists and recommending that a separate council be established resulted in the approval by the Board of a Council on Children, Adolescents, and Their Families with a specific charge.

JOINT COMMISSIONS

Commission on Judicial Action

Continued and improved exchange between this commission and the district branches has proven valuable and effective—two members of the Assembly participated in the work of the commission. At the request of the commission, the Assembly approved a resolution to set up commissions on judicial action in district branch areas to serve as intermediaries with the national commission to seek collaboration with the Commission on the Mentally Disabled of the American Bar Association and the local bar associations where this can be productive.

Joint Commission on Government Relations

This has become a very important component of the Association, with its chairperson being appointed jointly by the President and the Speaker and its membership consisting of representatives from the seven area councils. It collaborates with the Division of Government Relations in the APA Central Office and with the district branch legislative representatives. It is doing a remarkable job in keeping the Board, the Assembly, and the membership informed of developments in national, state, and local legislation pertinent to mental health and in offering the Association's informed advice to government representatives.

Resolutions on legislative and judicial intrusion into psychiatric practice, confidentiality of the psychiatrist-patient relationship, and questions arising about psychiatric services in nursing homes and about psychiatry as primary care have been referred to this joint commission.

CONSTITUTIONAL COMMITTEES

An Assembly-initiated constitutional amendment to Article II, Section 1, "to act as an advocate for patients and those actually or potentially making use of mental health services," was referred to the Committee on Constitution and By-Laws and submitted by this committee to and approved by the Board.

Questions regarding the requirement to state whether an applicant for medical licensure in certain states has "ever been in psychotherapy" were referred to the Ethics Committee. This committee was also asked to explore the inclusion of alternative or additional actions to be taken in situations where unethical conduct by a member is established. The Assembly further suggested that a copy of *The Principles of Medical Ethics with Annotations Especially Applicable to Psychiatry* be given to each new member of the Association.

A proposed pamphlet on APA functioning, produced by the Committee of Residents, was approved in principle and, through the Board, was referred to the APA and Assembly Membership Committees for revision and final editorial review.

BOARD OF TRUSTEES

Throughout this eventful year the Assembly's advice and consent was actively sought by the Board and eagerly offered by the Assembly. The Assembly also appreciated the effective presence and contributions of the officers and Trustees of the Association at its meetings. The help and guidance of the Central Office has continued to be invaluable and indispensable.

MILTIADES L. ZAPHIROPOULOS, M.D.

Report of the Speaker-Elect

THE YEAR AHEAD will probably be one of unusual transition, one in which the Assembly and the membership will consider a drastic modification of our past structure. While change is mandated by our growth, the exact form of such alteration is subject to reasonable disagreement. A variety of value systems is represented among us, each of which conveys rightness and wrongness from a different perspective. The inherent pluralism of our membership requires a devotion to and a recognition of our professional purpose and function. As I have said before, the essence of a profession is personalized service based on specialized learning ethically applied. I adhere to that concept as the foundation of the profession and its representative structure.

We live in a dynamic world in which our organization has a legitimate guild purpose as well as a leadership role in determining the use of our services for the greatest good. While we must devote the most punctilious attention to our needs as a guild, we must be sufficiently aware and flexible to avoid becoming birds in a "guilded" cage, inhabitants of a ghetto world where we can communicate only with each other in disputatious anger and frustration.

Attention to structural organization and devotion to a profession are not necessarily a vice, and internecine and "siblicidal" (a word coined to replace "fratricidal") warfare in the name of a school of thought or in furtherance of other causes is certainly not a virtue. This is not to say that past practices, rules, and ideas are infallible; the immense effort by the psychiatric leadership in the last year bespeaks the contrary.

Democracy is not merely a word or a structure; it is a process dependent upon the participation by the individual member in conformance with the role both approved by him/her and then allowed to or spelled out for him/her. The purpose of a new Constitution is to facilitate this process in a systematized and orderly fashion; this purpose will be met only to the degree that individual members conform to and participate in the process that they approve.

The Assembly will be particularly affected by such change, as the various proposals confer both greater responsibility upon the delegates and greater constraints upon the manner in which they are chosen. The Assembly has become more important not because of its inherent goodness but because one cannot have an annual town meeting of 22,000 people and one cannot confer unchecked power on a small group whose members are often determined by the vagaries of name recognition. Equally important is balancing the need for continuity with the need for flexibility, innovation, and accessibility. Similarly, policies governing complex issues cannot reasonably be determined by the individual unless that individual is well informed as to the issues, the fact base, and the merits of alternative solutions. The more complex the issue, the greater the need to delegate to a group designed for this purpose. It has been said that new burdens will fall to the lot of the Assembly; this is only partly so. The true burden will be that of the individual member and his/her responsibility to participate at the district branch level where the possibility of influence is maximized.

In the course of my years as a migratory psychiatrist with a variety of professional careers, I have found most stimulating and exciting the immense spectrum of peoples and roles encompassed within our field. Psychiatry is a medical specialty with the broadest perspective in medicine, the most humanistic and concerned of human endeavors, and the most learned in the sense that so much information arduously accumulated by the efforts of the human intellect is applicable to our purposes.

With only the most tenuous ties of our profession to bind us, we reflect an amazing array of cultures, nationalities, regions, races, sexes, sexual practices, political beliefs, religious and philosophic orientations, and professional roles. We are truly international in purpose, practice, and constituency. We are also the inheritors of the noble philosophy of the New World, which sought to welcome everyone to these shores. I recognize that the society in which we live has failed grievously at times in this regard, but that should not deter us from opening the doors as a profession to all qualified, both from within and from without, and this we have done. With this heritage, we cannot afford to dissipate our professional blood unnecessarily on the sacrificial altar of other identifications and causes.

From another vantage point, psychiatry can be viewed as a vital, living organism which we hope will never reach maturity, for maturity implies the end of growth and the onset of senescence. Our potential for continuity and relevance depends on constant evolution and adaptation to changing needs, pressures, knowledge, and goals.

Let us therefore seek unity amidst our pluralism. Let us act with compassion, upon knowledge and experience, and without prejudice or prejudgment, but let us not ignore the need for reasonable judgment and appropriate discrimination. Let us attempt to speak for all, while viewing with skepticism those who would speak for some. Let us protest when the voices of the ill-informed, the dogmatic, and the self-serving raise their cry in the halls of the legislatures and the offices of government. Let us lead by deed and not by word. Let us recognize that image and acceptance must be based on individual and group behavior, participation, and accomplishment at all levels and in all places. We cannot withdraw to a self-imposed ghetto of injured professionalism.

To these principles and goals I hope to direct my energies as Speaker, not as a leader but as a moderator and coordinator with those others who share the responsibility for carrying out the purposes of the American Psychiatric Association.

IRWIN N. PERR, M.D., J.D.

This is an edited version of the report presented by the Speaker-Elect of the Assembly of District Branches to the annual business meeting in Miami, Fla., May 11, 1976.

Report of the Committee of Tellers

THE COMMITTEE OF TELLERS met at APA headquarters in Washington, D.C., on April 8, 1976. Committee members present were Dr. Donald McKnew and Dr. Leon Cytryn; Dr. Eugene Hargrove, committee chairperson, had unexpectedly been called out of town. Dr. McKnew served as acting committee chairperson. Rulings were made on irregular ballots and votes noted in the final report presented to the Board of Trustees on April 11, 1976.

There were 20,463 eligible voters. Of these, 11,139 (54.4%) returned ballots. In the three areas in which a Trustee was being elected, Areas I, IV, and VII, 56.1%, 61.1%, and 58.8%, respectively, of the eligible voters returned ballots.

It was noted that 17 voters returned ballots in unofficial envelopes; and 7 returned ballot envelopes without ballots in them. There was only one request for ballots from a member who did not receive them; a second request was from a nonmember. Ballots were not mailed to the member, in accordance with guidelines for a totally secret election.

On April 8, 1976, the Committee of Tellers certified the following individuals as elected: Dr. Charles B. Wilkinson, Treasurer; Dr. Nancy C. A. Roeske, Trustee-at-Large; Dr. William B. Spriegel, Area IV Trustee; Dr. David Starrett, Area VII Trustee.

The Committee of Tellers further certified that in three offices, President-Elect, Vice-President, and Area I Trustee, no candidate obtained the mandated 40% plurality of the votes cast as required in the *Operations Manual* of the Board. A runoff election between the top two candidates in each office was held and the following individuals were elected: Dr. Jack Weinberg, President-Elect; Dr. Alan A. Stone, Vice-President; Dr. Ben W. Feather, Area I Trustee.

In addition, the Committee of Tellers certified that the following amendments to the By-Laws were approved: Chapter 3, Section 3; Chapter 8, Section 5; Chapter 9, Section 1; Chapter 10, Section 1.

In every instance, percentages of those in favor or opposed were found to conform to the requirements contained in the Constitution and By-Laws for the adoption of amendments.

The Committee of Tellers also certified that the two referenda by petition were approved. Again, percentages of those in favor were found to conform to the requirements contained in the Constitution and By-Laws for the adoption of referenda.

EUGENE A. HARGROVE, M.D.

This is an edited version of the report presented by the Chairperson of the Committee of Tellers to the annual business meeting in Miami, Fla., May 11, 1976.

Report of the Membership Committee

DURING 1975, the Association admitted the following new members: 476 Members-in-Training, 25 Associate Members, and 919 General Members for a total of 1,420 new members. Further, 63 members resigned, 25 members were dropped from the Association for not being in good standing in a district branch, and 104 members were dropped for nonpayment of dues. The names of the 175 members who died during the year are inscribed in the Necrology Register. Total membership losses were 367.

A total of 655 members were advanced to General Member status from Member-in-Training or Associate Member status. On recommendation of the Committee on Membership, the following actions were taken by the Board of Trustees at its meeting on May 9, 1976: 206 General Members were advanced to Fellow status, 2 Corresponding Fellows and 10 Corresponding Members have been admitted to membership, 5 General Members-at-Large were admitted, 16 members joined the ranks of 50-year Life Fellows and Life Members, 146 Fellows became Life Fellows, 57 General Members became Life Members, and 36 members were transferred to the status of Inactive Membership.

In addition, the Board of Trustees approved the following transfers in membership status: 1 Fellow to Corresponding Fellow, 1 Corresponding Member to Corresponding Fellow, and 7 transfers to Corrresponding Membership.

As of March 31, 1976, the Association had 22,426 members: 1,413 Members-in-Training, 976 Associate Members, 13,079 General Members, 4,430 Fellows, 313 Life Members, 1,237 Life Fellows, 126 Corresponding Members, 203 Corresponding Fellows, 26 Distinguished Fellows, 33 Honorary Fellows, and 590 Inactive Members. This total of 22,426 compares to 21,360 a year ago for a net gain of 1,066 members.

LAURA E. MORROW, M.D.

This is an edited version of the report presented by the Chairperson of the Membership Committee to the annual business meeting in Miami, Fla., May 11, 1976.

1975 Annual Report of the American Board of Psychiatry and Neurology, Inc.

OFFICERS AND MEMBERS OF THE BOARD

AT ITS ANNUAL MEETING on October 5, 1975, the Board elected the following officers: Dr. Milton Greenblatt, President; Dr. David B. Clark, Vice-President; Dr. Chester M. Pierce, Secretary; and Dr. Thomas W. Farmer, Treasurer.

The following members were elected to the Board: Dr. Donald G. Langsley, who had been nominated by the American Psychiatric Association to replace Dr. Harvey J. Tompkins; Dr. S. Mouchly Small, who had been nominated by the Section on Psychiatry of the American Medical Association to replace Dr. Robert L. Stubblefield; and Dr. Patrick F. Bray, who had been nominated by the American Neurological Association to replace Dr. William M. Landau.

The 1976 Directors of the American Board of Psychiatry and Neurology, Inc., are as follows:

Nominated by the American Medical Association: Dr. S. Mouchly Small (term expires December 1980), Dr. Richard M. Steinhilber (term expires December 1977), Dr. James N. Sussex (term expires December 1979), Dr. Thomas R. Johns (term expires December 1979), and Dr. Robert J. Joynt (term expires December 1976).

Nominated by the American Psychiatric Association: Dr. Milton Greenblatt* (term expires December 1976), Dr. Chester M. Pierce* (term expires December 1979), Dr. Donald Langsley (term expires December 1980), Dr. Marc H. Hollender (term expires December 1977), and Dr. Alfred M. Freedman (term expires December 1979).

Nominated by the American Neurological Association: Dr. Melvin D. Yahr (term expires December 1979), Dr. Patrick F. Bray (term expires December 1980), Dr. David B. Clark* (term expires December 1976), and Dr. Thomas W. Farmer (term expires December 1977).

Nominated by the American Academy of Neurology: Dr. Audrey S. Penn (term expires December 1979) and Dr. Dewey K. Ziegler (term expires December 1979).

EXAMINATIONS

Part I

At the Part I examination (written) on April 21, 1975, 1,783 psychiatrists were tested; 1,163 (65.2%) passed and 620 (34.8%) failed. Of the 456 neurologists tested, 292 (64%) passed and 164 (36%) failed. (See table 1 for the number of candidates declared eligible and notified for Part I in 1975 and table 2 for a comparison of these figures with recent years.)

This is an edited version of the report presented by the American Board of Psychiatry and Neurology, Inc., to the American Psychiatric Association, May 11, 1976.

*These Directors are serving their second term of four years and are not eligible for reappointment.

Part II

Statistics on Part II examinations administered in 1975 and 1976 to date are listed in tables 3–12.

The Part II examination schedule for 1976–1977 includes examinations in Minneapolis on June 21–22, 1976, in Chicago on October 18–19, 1976, in Washington, D.C., on April 18–19, 1977, and in Kansas City, Mo., on June 6–7, 1977.

CHILD PSYCHIATRY

Members of the 1976 Committee on Certification in Child Psychiatry are: Dr. John F. McDermott, Chairperson; Dr. Jeanne Spurlock, Vice-Chairperson; Dr. Irving Philips, Secretary; Dr. Richard Ward; Dr. Barbara Fish; and Dr. Joseph Green. The Board recently approved the committee's nomination of Dr. Norman Bernstein, Director of Child Psychiatry Training, Massachusetts General Hospital, Boston, Mass., to replace Dr. Fish, whose second term expires in February 1976.

On April 4–7, 1976 the committee held a conference for approximately 121 child psychiatry training directors at the Sil-

TABLE 1
Number Declared Eligible and Notified for Part I Written Examination April 19, 1976

Item	Psychiatry	Neurology	Total
Number declared eligible and notified	2,530	583	3,113
Number who declined or withdrew	800	122	922
Number remaining for written examination as of March 1976	1,730	461	2,191

TABLE 2
Five-Year Comparison of Number Declared Eligible and Notified for Part I Examination

Item	1972	1973	1974	1975	1976
Total eligible	1,552	1,999	2,098	3,124	3,113
Total who accepted examination	1,119	1,381	1,821	2,408	2,392
Total who actually appeared	965	1,205	1,627	2,239	2,191

TABLE 3
Analysis of Performance of Group Who Took Part II Examination in Atlanta, Ga., February 1975

Item	Psychiatry		Neurology		Child Neurology		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Candidates	294	78.0	75	19.9	8	2.1	377	100.0
Results								
Pass	187	63.6	50	66.7	8	100.0	245	65.0
Fail	26	8.8	3	4.0	0		29	7.7
Fail (must reapply)	44	15.0	10	13.3	0		54	14.3
Condition	37	12.6	12	16.0	0		49	13.0

TABLE 4
Analysis of Performance of United States (N=307) and Foreign (N=70) Medical School Graduates Who Took Part II Examination in Atlanta, Ga., February 1975

Results	United States Graduates		Foreign Graduates	
	Number	Percent	Number	Percent
Pass	211	68.7	34	48.6
Fail	24	7.8	5	7.1
Fail (must reapply)	30	9.8	24	34.3
Condition	42	13.7	7	10.0

TABLE 5
Analysis of Performance of Group Who Took Part II Examination in Boston, Mass., May 1975

Item	Psychiatry		Neurology		Total	
	Number	Percent	Number	Percent	Number	Percent
Candidates	318	80.7	76	19.3	394	100.0
Results						
Pass	162	51.0	49	64.5	211	53.5
Fail	61	19.2	7	9.2	68	17.3
Fail (must reapply)	24	7.5	5	6.6	29	7.4
Condition	71	22.3	15	19.7	86	21.8

TABLE 6
Analysis of Performance of United States (N=341) and Foreign (N=53) Medical School Graduates Who Took Part II Examination in Boston, Mass., May 1975

Results	United States Graduates		Foreign Graduates	
	Number	Percent	Number	Percent
Pass	191	56.0	20	37.7
Fail	59	17.3	9	17.0
Fail (must reapply)	23	6.7	6	11.3
Condition	68	20.0	18	34.0

TABLE 7
Analysis of Performance of Group Who Took Part II Examination in St. Louis, Mo., October 1975

Item	Psychiatry		Neurology		Child Neurology		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Candidates	570	81.7	105	15.1	22	3.2	697	100.0
Results								
Pass	326	57.2	56	53.3	10	45.0	392	56.0
Fail	120	21.1	12	11.4	1	5.0	133	19.0
Fail (must reapply)	27	4.7	5	4.8	0		32	5.0
Condition	97	17.0	32	30.5	11	50.0	140	20.0

TABLE 8
Analysis of Performance of United States (N=483) and Foreign (N=214) Medical School Graduates Who Took Part II Examination in St. Louis, Mo., October 1975

Results	United States Graduates		Foreign Graduates	
	Number	Percent	Number	Percent
Pass	304	62.9	88	41.1
Fail	60	12.4	73	34.0
Fail (must reapply)	26	5.4	6	3.0
Condition	93	19.3	47	21.9

TABLE 9
Analysis of Performance of Group Who Took Part II Examination in New Orleans, La., January 1976

Item	Psychiatry		Neurology		Child Neurology		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Candidates	270	76.0	76	21.0	9	3.0	355	100.0
Results								
Pass	164	60.7	50	65.8	8	88.9	222	62.5
Fail	30	11.1	3	4.0	0		33	9.3
Fail (must reapply)	55	20.4	11	14.0	1	11.1	67	18.9
Condition	21	7.8	12	15.8	0		33	9.3

TABLE 10
Analysis of Performance of United States (N=236) and Foreign (N=119) Medical School Graduates Who Took Part II Examination in New Orleans, La., January 1976

Results	United States Graduates		Foreign Graduates	
	Number	Percent	Number	Percent
Pass	163	69.1	59	49.6
Fail	18	7.6	15	12.6
Fail (must reapply)	30	12.7	37	31.1
Condition	25	10.6	8	6.7

TABLE 11
Analysis of Performance of Group Who Took Part II Examination in Los Angeles, Calif., April 1976

Item	Psychiatry		Neurology		Child Neurology		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Candidates	481	90.0	51	9.0	3	1.0	535	100.0
Results								
Pass	329	68.4	33	64.7	0		362	67.7
Fail	41	8.5	2	4.0	0		43	8.0
Fail (must reapply)	23	4.8	7	13.7	3	100.0	33	6.2
Condition	88	18.3	9	17.6	0		97	18.1

TABLE 12
Analysis of Performance of United States (N=433) and Foreign (N=102) Medical School Graduates Who Took Part II Examination in Los Angeles, Calif., April 1976

Results	United States Graduates		Foreign Graduates	
	Number	Percent	Number	Percent
Pass	310	71.6	52	51.0
Fail	31	7.1	12	11.8
Fail (must reapply)	15	3.5	18	17.6
Condition	77	17.8	20	19.6

verado Country Club in Napa, Calif. The conference focused on the "Roles and Functions of Child Psychiatrists," a report from the Project on Certification in Child Psychiatry. The report is the result of a joint three-year study by the committee and the Center for Educational Development of the University of Illinois College of Medicine for the purposes of 1) developing more valid and reliable procedures for certifying competence in child psychiatry, 2) generating data that would be of assistance to training directors in increasing the efficiency and effectiveness of child psychiatry training programs; and 3) serving as a pilot for a larger study in general psychiatry to be initiated subsequently by the American Board of Psychiatry and Neurology, Inc. The study was funded by the Grant Foundation, the Maurice Falk Medical Fund, and the Ittleson Family Foundation. Copies of the report are available from the Board's Executive Office at $6.00 per copy.

BOARD POLICY DECISIONS AND ITEMS OF INTEREST

In order to meet the demand for improved communication and better cooperation between the American Board of Psychiatry and Neurology and its constituent organizations, the Board will be issuing summaries of Neurology to *Psychiatric News* and other relevant publications from time to time. The Board welcomes comments and suggestions on all the items reported.

Members of the American Board of Psychiatry and Neurology met with Trustees and council chairmen of the APA for several hours on December 6, 1975, during the meetings of the Board of Trustees. A vigorous interchange ensued and much clarification was achieved. In particular it was pointed out that the ABPN members are *elected* by that Board from *nominations* submitted by parent organizations: the American Psychiatric Association, the American Medical Association, the American Neurological Association, and the American Academy of Neurology. Misunderstanding has arisen in the past from the assumption that the ABPN members were *elected* by parent bodies. Qualifications for Board membership and procedures for nominations are now being formulated by the APA Council on Medical Education and Career Development, with consultation by ABPN.

American Board of Psychiatry and Neurology members met with the full session of the American Association of Directors of Psychiatric Residency Training Programs in New Orleans on January 17, 1976, prior to the examination being held in that city. Dr. Milton Greenblatt, President of the Board, discussed a series of questions that had been submitted to him in advance, followed by lively discussions from the floor. Meetings were also scheduled with the American Association of Chairmen of Departments of Psychiatry in Miami, and two panels on residency training were scheduled for the convention to which members of the Board will contribute.

In its policy meetings in New Orleans, January 17–18, 1976, the American Board of Psychiatry and Neurology took the following significant actions:

1. Agreed to develop a contract with the Audio-Visual Education Service at the Veterans Administration Hospital, Brentwood, Calif., for further exploration of audiovisual techniques.
2. Authorized the development of a design for a validation study to determine the relationship between performance on the examination and clinical competence in the field. Organized a cohort study of 100 psychiatrist and 100 neurologist candidates to identify their performance over time.
3. Raised the fees for examinations as follows: Application fee increased by $10, to $135; Part I (written) examination fee raised by $50, to $100; and Part II (oral) examination

fee raised by $40, to $190. It was noted that examination fees had not been raised by the Board for three years and that both inflation and increased expenses made this decision necessary.

4. Received a report from the Child Psychiatry Committee (Dr. John McDermott, chairperson) indicating progress in technical improvement of the child psychiatry examination and updating developments from their evaluation study.

5. Agreed to collaborate with the American Association of Directors of Psychiatric Residency Training Programs in preparing a questionnaire on the postgraduate year and to share in the expenses.

6. Referred to the Examination Committee for implementation a request by the APA Committee on Ethics that questions on ethics be incorporated into the American Board of Psychiatry and Neurology examination.

7. Appointed a search committee to recruit a full-time executive officer for the American Board of Psychiatry and Neurology with qualifications as an administrator and educator, and, especially, with ability to develop research in educational and examination procedures.

In its policy meeting in Los Angeles, April 10–11, the American Board of Psychiatry and Neurology took the following significant actions:

1. Approved elimination of the two-year experience requirement for admission to the Part II (oral) examination.

2. Approved an expanded and more detailed guideline for examiners in evaluating performance of candidates in the oral examination.

3. Approved plans to make the audiovisual examination operative for the October 1976 oral examination in Chicago. The audiovisual examination will replace one of the clinical hours in psychiatry and one of the clinical hours in neurology.

4. Instructed the central office to set up a mechanism for feedback of examination results to program directors as follows: for those candidates giving permission, examination results will be conveyed to their program directors; results for a series of candidates trained in a given program will be analyzed and the generalizations as to their collective performance will be conveyed to the training program director without divulging the identity of any given candidate.

5. Appointed a committee to delineate more specifically the areas of required knowledge in the written examination, with illustrations of the types of questions normally asked in this examination.

6. Received a report on the Child Psychiatry Examination of 106 candidates examined in Los Angeles, March 8–9, and discussed in detail the results of a very successful post-examination conference on "Roles and Functions of the Child Psychiatrist" held April 4–7 in Silverado, Calif. (Dr. John McDermott reporting).

7. Reviewed progress on two research projects: relevance of Board Examination to clinical competence, and study of examination results for cohorts in psychiatry and neurology.

LESTER H. RUDY, M.D.
Executive Director

EDITOR'S NOTE: In accordance with an action of the Board of Trustees at its June 1976 meeting, all documents pertaining to the Constitution and By-Laws, including the Report of the Committee on Constitution and By-Laws, will be published in the December 17, 1976, issue of *Psychiatric News*.

In schizophrenia...

Because efficacy and side effects are a single consideration



Loxitane®
LOXAPINE SUCCINATE
Lederle

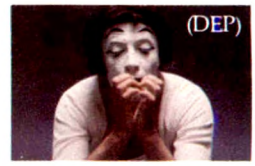
The record speaks louder than words

See LOXITANE prescribing information on last page of this advertisement for contraindications, warnings and precautions and for more detailed information concerning side effects.

From the record:

LOXITANE substan symptoms of schizo

DEPRESSION
Somatic Concern
Anxiety
Guilt Feelings
Depressive Mood



ACUTE SCHIZOPHRENIC PATIENTS
(Treated 3 to 6 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE
TRIFLUOPERAZINE
CHLORPROMAZINE

Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
57	41	53	54	59
37	21			
		42	52	36

CHRONIC SCHIZOPHRENIC PATIENTS
(Treated 8 to 12 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE
TRIFLUOPERAZINE
CHLORPROMAZINE

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
36	27	9	60	28	-6
44	25	-3	48		
				-64	0

tially reduces the phrenia

Results of 11 controlled studies[1] evaluated by the Brief Psychiatric Rating Scale to determine the efficacy of LOXITANE® Loxapine Succinate by comparing it with trifluoperazine and chlorpromazine. They do not imply a claim of differential effectiveness or superiority. However, certain trends, not statistically significant, suggest superiority. These require further tests for confirmation.

1. Data on file, Clinical Research Department, Lederle Laboratories.

THOUGHT DISORDER

Conceptual Disorganization
Grandiosity
Suspiciousness
Hallucinatory Behavior
Unusual Thought Content



Denber, HCB (85 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
68	52	54	79	52
40	50			
		64	67	37

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
20	49	6	58	19	14
8	29	-3	36		
				9	25

ANERGIA

Emotional Withdrawal
Mannerisms and Posturing
Motor Retardation
Blunted Affect



Denber, HCB (85 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
53	43	13	43	52
33	33			
		43	26	32

Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
9	15	-1	60	19	23
14	27	-12	42		
				16	21

EXCITEMENT – DISORIEN-TATION

Excitement
Disorientation



Denber, HCB (85 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
71	61	101	92	46
27	40			
		82	68	31

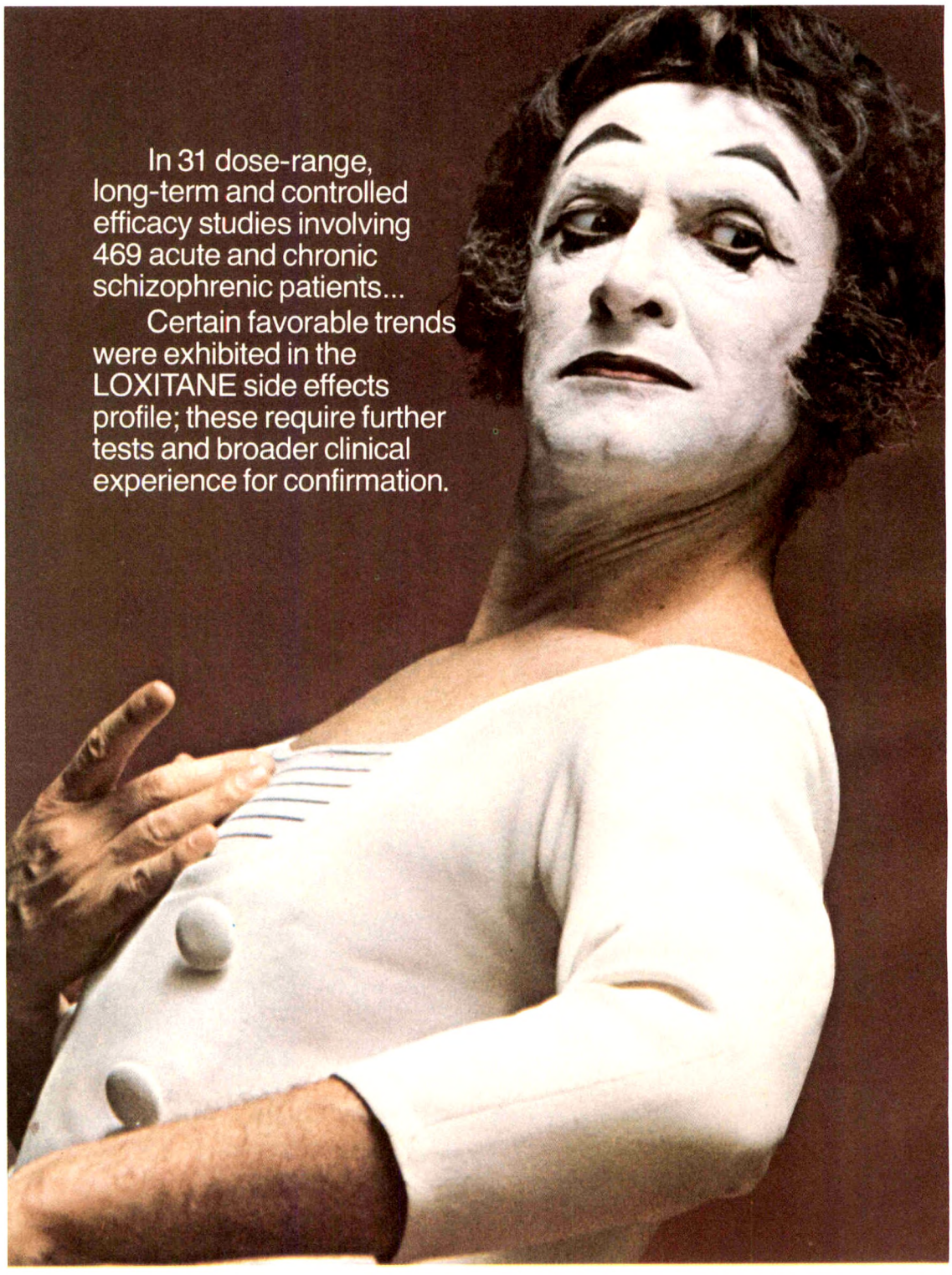
Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
17	26	22	–	49	3
18	44	-24	–		
				42	2



Loxitane®
LOXAPINE SUCCINATE
Lederle

From the record:

LOXITANE has favorable trends



In 31 dose-range, long-term and controlled efficacy studies involving 469 acute and chronic schizophrenic patients...

Certain favorable trends were exhibited in the LOXITANE side effects profile; these require further tests and broader clinical experience for confirmation.

exhibited certain in side effects profile

While cardiac arrest, blood dyscrasias and renal toxicity have been reported with other antipsychotic agents, they have not been seen with LOXITANE. Hepatotoxicity manifested by jaundice or biliary stasis has not been observed. Transient liver enzyme changes, however, have been reported, but it has not been determined whether they are related to LOXITANE administration.

Although a few cases of changes in ECG have been reported, a causal relationship between this reaction and LOXITANE has not been established. Clinical experience with LOXITANE has not demonstrated ocular toxicity, however, the possibility of its occurrence cannot be ruled out at this time. Of the various endocrine abnormalities, only galactorrhea has been noted with LOXITANE, and only in rare instances.

Manifestations of adverse effects on the central nervous system other than extrapyramidal symptoms have been encountered infrequently, and drowsiness, when it occurs, is usually mild and subsides with continued therapy. Skin rashes of uncertain etiology have been observed in a few patients during the hot summer months; therefore the possibility of phototoxicity and/or photosensitivity cannot be excluded. Like certain other antipsychotic agents, LOXITANE lowers the convulsive threshold and should be used with extreme caution in patients with a history of convulsive disorders.

In general, LOXITANE presents a profile of extrapyramidal side effects similar to that of other agents used in the treatment of schizophrenia.

Cardiovascular effects such as hypotension, hypertension, light-headedness and syncope have been reported. Anticholinergic effects seen with LOXITANE include dry mouth, nasal congestion, constipation and blurred vision.

See LOXITANE prescribing information on next page for contraindications, warnings and precautions and for more detailed information concerning side effects.

A range of dosage strengths to suit the patient's individual needs

Supplied

Capsules

10 mg Green and Yellow

25 mg Green Two Tone

50 mg Green and Blue

Recommended Daily Dosage

Initial Dosage	MILD 10 mg b.i.d.	MODERATE 10 mg t.i.d. or q.i.d.	SEVERE 25 mg b.i.d.
First 7 to 10 Days	Increase dosage until psychotic symptoms are controlled. Dosage should not exceed 250 mg/day. Usual dosage during titration: 50 to 150 mg/day.		
Maintenance Dosage	Adjust to lowest effective level. Usual maintenance dosage: 60 to 100 mg/day. Many patients are controlled with dosages as low as 20 to 60 mg/day.		



Loxitane®

LOXAPINE SUCCINATE

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Because efficacy and side effects are a single consideration

Loxitane®
LOXAPINE Lederle SUCCINATE

Because efficacy and side effects are a single consideration

FOR ORAL USE

DESCRIPTION

LOXITANE *loxapine*, a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f] [1,4]oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg. of loxapine succinate is equivalent to 1 mg. of loxapine.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE *loxapine succinate* is indicated for the manifestations of schizophrenia.

LOXITANE has not been evaluated for the management of behavioral complications in patients with mental retardation, and therefore it cannot be recommended.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

Usage in Pregnancy—Safe use of LOXITANE *loxapine succinate* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children—Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects—Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE *loxapine succinate* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects—Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin—Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Anticholinergic Effects—Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions—Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients. Rarely, galactorrhea and menstrual irregularity of uncertain etiology have been reported.

DOSAGE AND ADMINISTRATION

LOXITANE *loxapine succinate* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

HOW SUPPLIED

LOXITANE *loxapine succinate* is supplied in the following base equivalent strengths:

CAPSULES Hard Shell Printed "Lederle"

10 mg—Green and Yellow; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5360.

25 mg—Green Two Tone; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5361.

50 mg—Green and Blue; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5362.

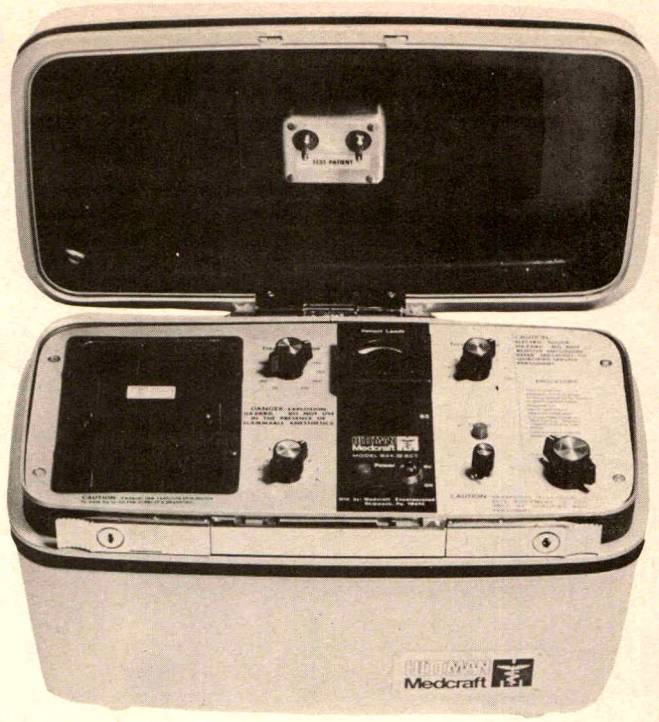
REV. 7/76

Because schizophrenia is symptoms

LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York 10965

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The B24 III



UL LISTED

...a new generation of electroconvulsive therapy instrumentation from Medcraft.

Designed with patient and operator safety in mind, this new series of instrumentation meets the rigorous requirements for listing by Underwriters Laboratories — UL 544, Standards for Medical and Dental Equipment. The B24 III provides the physician with the ultimate in precision dosage levels. Consistancy of desired output level is assured with the following features:

- Line Voltage Compensation -- allows compensation for fluctuations in incoming line voltages.
- Pre-programmed Voltage Selection — choice of eleven voltage levels from 70 volts to 170 volts.
- Automatic Treatment Timing — adjustable from 0.1 second to 1.0 second with or without Glissando.
- Current Output Indicators — visual assurance of current flow during treatment.

Exclusive Patient Test Module allows a complete systems integrity check of instrumentation prior to treatment. Clinical accuracy and dependability are assured by the use of 100% solid state circuitry. Double shielded transformer provides an additional margin of treatment safety. For ordering information, specifications and prices, write or call directly to:

HITTMAN Medcraft

Medcraft Incorporated
Box 542
Skippack, Pennsylvania 19474
Phone 215/584-6825

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P20576

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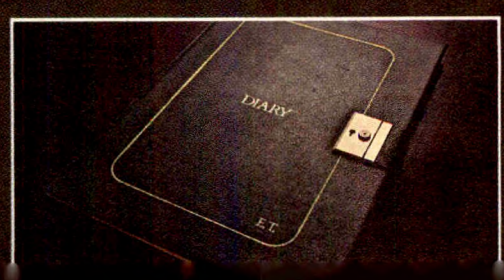
"Haven't noticed the palpitations too much. Not as tense when I turn in."

3/7

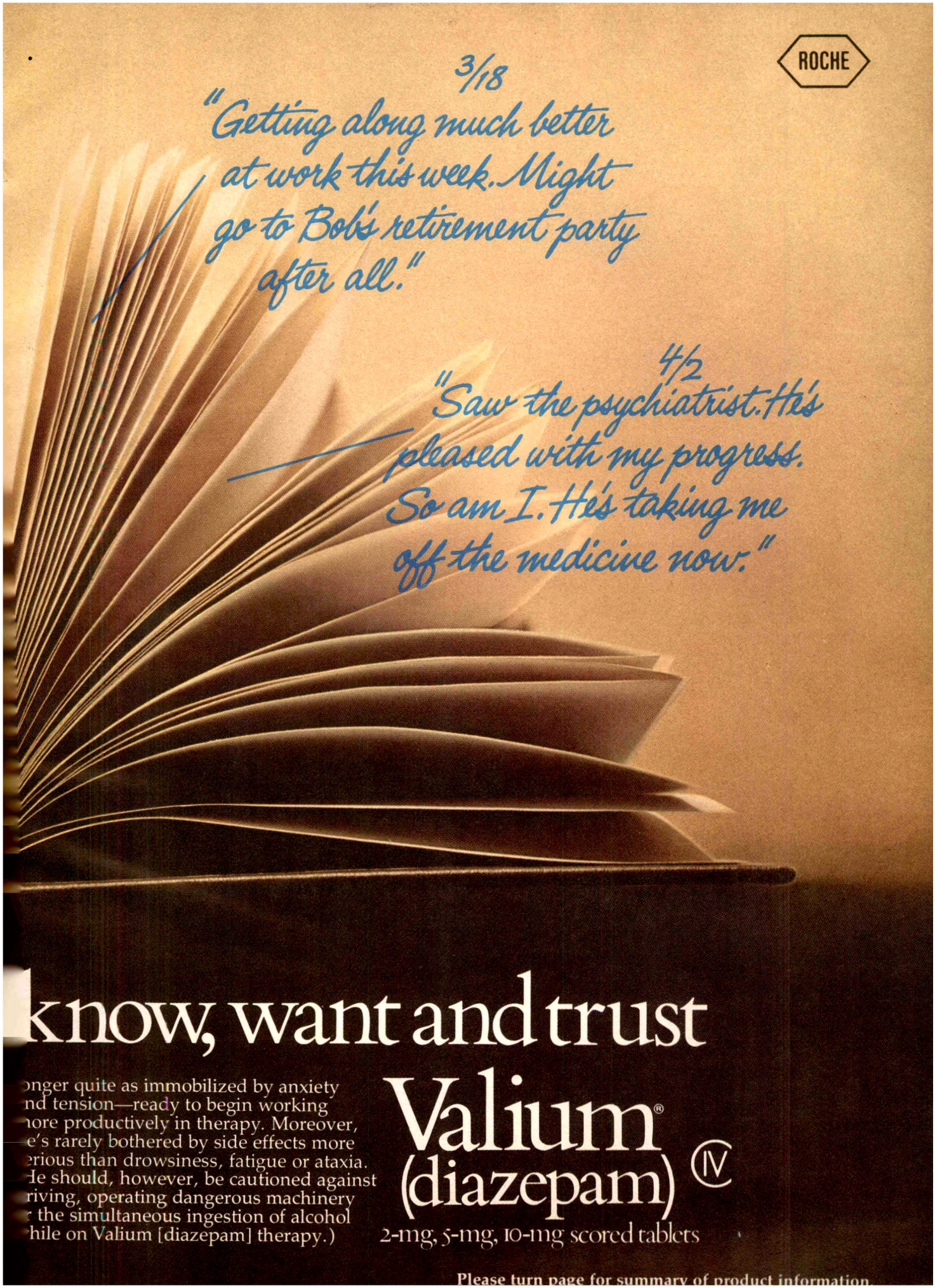
"Started taking the medicine today. It's starting to work already."

For your anxious psychoneurotic patient...

The response you



You've come to expect a certain kind of response with Valium (diazepam)—and that's the kind you generally get. A pronounced response. A response that start to benefit the anxious patient almost immediately. Within hours, your patient notices a definite easing of tension. And within days, he usually finds himself sig nificantly improved—calmer and no


ROCHE
3/18
"Getting along much better at work this week. Might go to Bob's retirement party after all."
4/2
"Saw the psychiatrist. He's pleased with my progress. So am I. He's taking me off the medicine now."
know, want and trust
onger quite as immobilized by anxiety
nd tension—ready to begin working
ore productively in therapy. Moreover,
e's rarely bothered by side effects more
erious than drowsiness, fatigue or ataxia.
le should, however, be cautioned against
riving, operating dangerous machinery
the simultaneous ingestion of alcohol
hile on Valium [diazepam] therapy.)
Valium®
(diazepam) IV
2-mg, 5-mg, 10-mg scored tablets
Please turn page for summary of product information

Patient response you can depend on.

Valium® (diazepam)

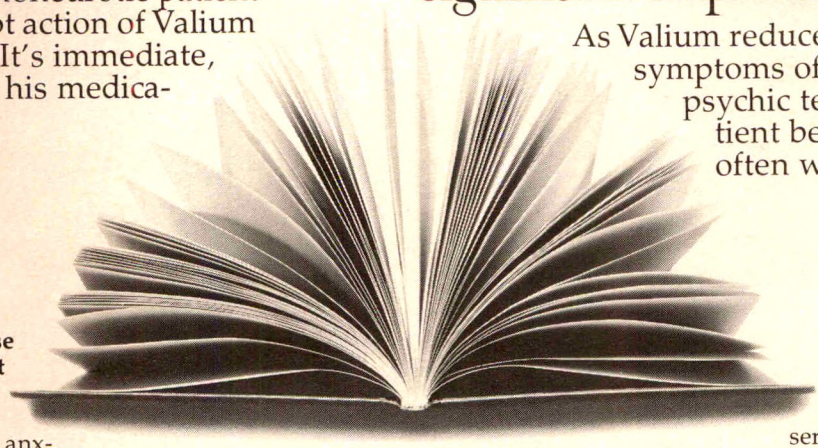
2-mg, 5-mg, 10-mg scored tablets

Initial calming in hours.

Your anxious psychoneurotic patient will find the prompt action of Valium highly reassuring. It's immediate, tangible proof that his medication is working.

Significant improvement in days.

As Valium reduces overwhelming symptoms of anxiety and psychic tension, your patient begins to feel better often within a few days.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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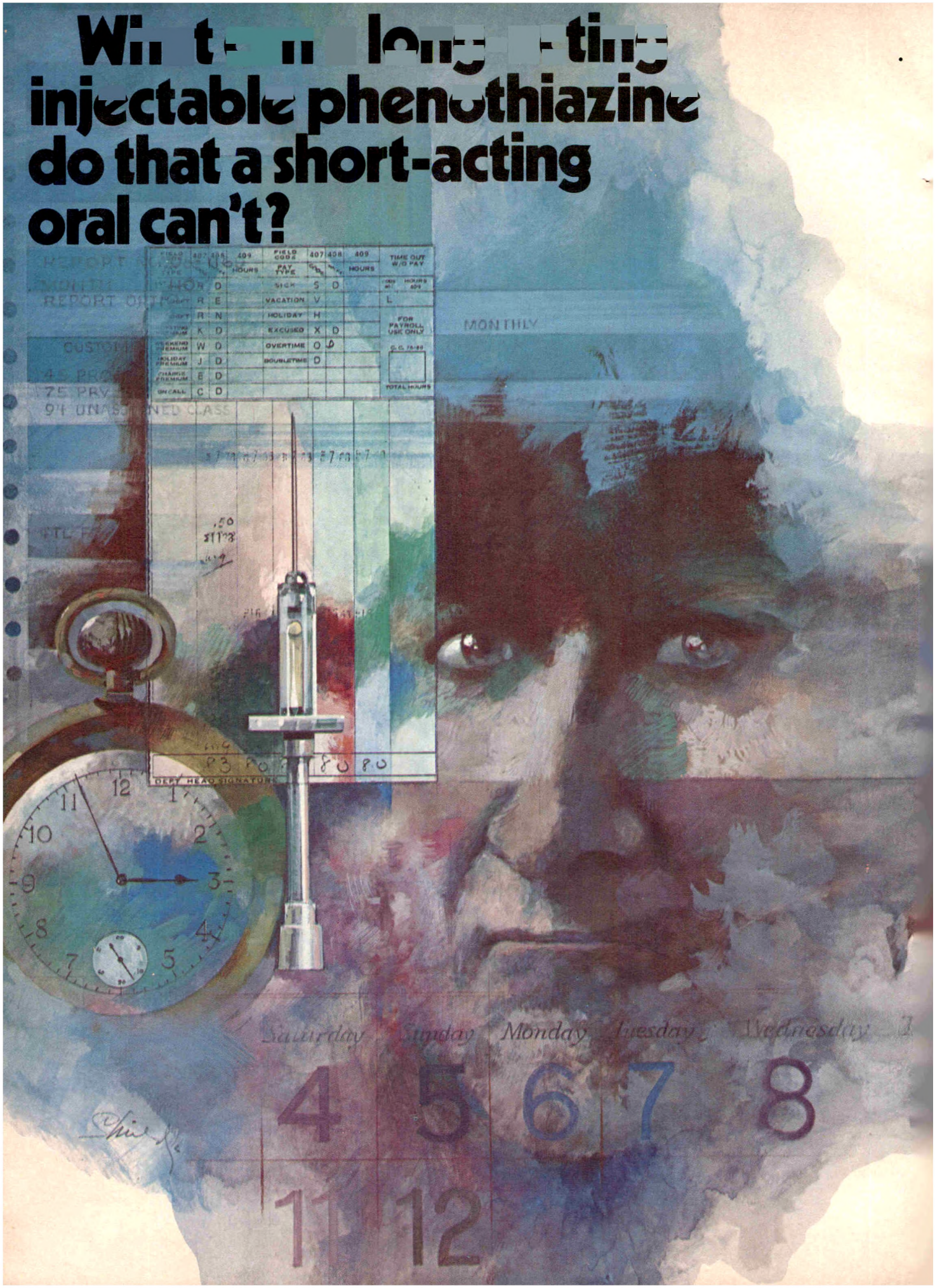
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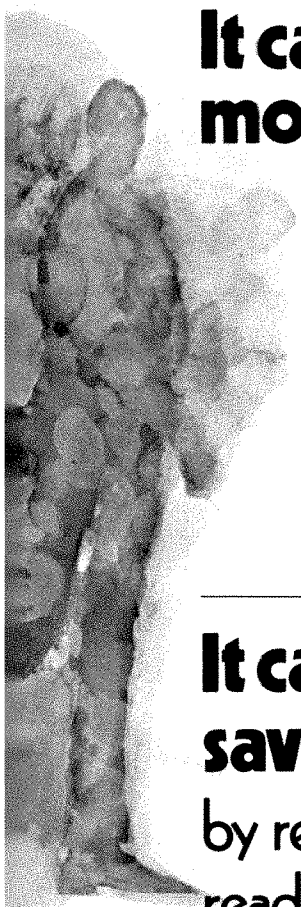
It can save time

Prolixin Decanoate (Fluphenazine Decanoate Injection), with duration of action that may last up to 4 weeks or longer in patients on maintenance therapy, can effect important savings in nursing time.

Approximate Staff Time Required to Medicate 18 Schizophrenic Patients*

	
8 a.m. ¾ hr. 1 p.m. ¾ hr. 6 p.m. ¾ hr.	1 injection every 28 days for most patients
= 2¼ hours nursing time	4 minutes required for each injection
2¼ hrs. x 28 days = 63 hours of nursing time every 28 days	= 1 hr., 10 minutes nursing time in 28 days
NURSING TIME SAVED IN 28 DAYS	61 hours and 50 minutes or more than 7½ eight-hour working days

*Adapted from Platt R. Br J Social Psychiatry 2: 187-191, 1968.



It can save money

Martin and Townend[1], who found from their study of Prolixin Decanoate that 15 of 39 patients could be maintained on 25 mg. every 4 weeks, also note that on this basis "a year's maintenance on chlorpromazine represents the order of 110 grams of phenothiazine as opposed to 0.33 gram of fluphenazine." Translating this into dollars shows the following potential hospital savings on the basis of patient population:

Agent and amount/year	Form	Cost/patient/ year	Cost/500 patients/ year
Chlorpromazine (SKF brand) 110 grams	8 oz. concentrate 100 mg./ml.†	$48.75*	$24,375
Prolixin Decanoate .33 grams	5 ml. vials 25 mg./ml.	$26.08**	$13,040
SAVINGS		$22.67 patient, year	$11,335 500 pts/yr.

* Calculated from prices published in 1976 Red Book.
** Calculated from Squibb 1976 price catalogue.
† With tablets, the annual cost is even greater.

It can even save people– by reducing readmissions

The controlled drug delivery system of Prolixin Decanoate helps get schizophrenic patients out of the hospital and helps them stay out. It promotes continuity of therapy—reducing outpatient drug defaulting from approximately 50% with oral medications according to one report[2] to about 16% according to another report[3].

It reduces the number and length of rehospitalizations. In one study of 103 patients maintained on injections of long-acting fluphenazines, total hospital readmissions for a year were cut from 191 to 50 and inpatient time from 8,713 days to 1,335 days[4].

It facilitates return to a productive life. A 12-month followup of 103 discharged patients revealed 77% in full-time employment or household duties and only 23% unemployed[4].

References:
1. Martin ICA and Townend RA: Brit J Psychiat 124: 173-6, 1974.
2. Goldberg HL, DiMascio A, Chaudhary B: Psychosomatics 11: 173-177, 1970.
3. Medical World News, February 11, 1972, p. 58H.
4. Denham J and Adamson L: Can Psychiat Assoc J 18: 235-7, 1973.

SQUIBB

Prolixin Decanoate®

Fluphenazine Decanoate Injection

may control schizophrenic symptoms for up to 4 weeks or longer in patients on maintenance therapy.

See next page for brief summary of prescribing information.

Prolixin Decanoate®

Fluphenazine Decanoate Injection

may control schizophrenic symptoms for up to 4 weeks or longer in patients on maintenance therapy.

Prolixin Decanoate (Fluphenazine Decanoate Injection) provides 25 mg. fluphenazine decanoate per ml. in a sesame oil vehicle with 1.2% (w/v) benzyl alcohol as a preservative.

CONTRAINDICATIONS: In presence of suspected or established subcortical brain damage. In patients who have a blood dyscrasia or liver damage, or who are receiving large doses of hypnotics, or who are comatose or severely depressed. In patients who have shown hypersensitivity to fluphenazine; cross-sensitivity to phenothiazine derivatives may occur.

Not intended for use in children under 12.

WARNINGS: Mental and physical abilities required for driving a car or operating heavy machinery may be impaired by use of this drug. Physicians should be alert to the possibility that severe adverse reactions may occur which require immediate medical attention. Potentiation of effects of alcohol may occur. Safety and efficacy in children have not been established because of inadequate experience in use in children.

Usage in Pregnancy: Safety for use during pregnancy has not been established; weigh possible hazards against potential benefits if administering this drug to pregnant patients.

PRECAUTIONS: Caution must be exercised if another phenothiazine compound caused cholestatic jaundice, dermatoses or other allergic reactions because of the possibility of cross-sensitivity. When psychotic patients on large doses of a phenothiazine drug are to undergo surgery, hypotensive phenomena should be watched for; less anesthetics or central nervous system depressants may be required. Because of added anticholinergic effects, fluphenazine may potentiate the effects of atropine.

Use fluphenazine decanoate cautiously in patients exposed to extreme heat or phosphorus insecticides; in patients with a history of convulsive disorders since grand mal convulsions have occurred; and in patients with special medical disorders such as mitral insufficiency or other cardiovascular diseases, and pheochromocytoma. Bear in mind that with prolonged therapy there is the possibility of liver damage, pigmentary retinopathy, lenticular and corneal deposits, and development of irreversible dyskinesia.

Fluphenazine decanoate should be administered under the direction of a physician experienced in the clinical use of psychotropic drugs. Periodic checking of hepatic and renal functions and blood picture should be done. Renal function of patients on long-term therapy should be monitored; if BUN becomes abnormal, treatment should be discontinued. "Silent pneumonias" are possible.

ADVERSE REACTIONS: *Central Nervous System*—Extrapyramidal symptoms are most frequently reported. These include pseudoparkinsonism, dystonia, dyskinesia, akathisia, oculogyric crises, opisthotonos, and hyperreflexia; most often these are reversible, but they may be persistent. One can expect a higher incidence of such reactions with fluphenazine decanoate than with less potent piperazine derivatives or straight-chain phenothiazines. The incidence and severity will depend more on individual patient sensitivity, but dosage level and patient age are also determinants. As these reactions may be alarming, the patient should be forewarned and reassured. These reactions can usually be controlled by administration of antiparkinsonian drugs such as benztropine mesylate or intravenous Caffeine and Sodium Benzoate Injection U.S.P., and by subsequent reduction in dosage.

Persistent Tardive Dyskinesia: As with all antipsychotic agents, persistent and sometimes irreversible tardive dyskinesia may appear in some patients on long-term therapy or may occur after discontinuation of drug. The risk seems greater in elderly patients, especially females, on high dosages. The syndrome is characterized by rhythmical involuntary movements of tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and may be accompanied by involuntary movements of extremities. There is no known effective therapy for tardive dyskinesia; usually the symptoms are not alleviated by antiparkinsonism agents. If the symptoms appear, discontinuation of all antipsychotic agents is suggested. The syndrome may be masked if treatment is reinstituted, or drug dosage increased, or a different antipsychotic agent used. Reports are that fine vermicular movements of the tongue may be an early sign of the syndrome which may not develop if medication is stopped at that time.

Phenothiazine derivatives have been known to cause restlessness, excitement, or bizarre dreams; reactivation or aggravation of psychotic processes may be encountered. If drowsiness or lethargy occur, the dosage may have to be reduced. Dosages, far in excess of the recommended amounts, may induce a catatonic-like state.

Autonomic Nervous System—Hypertension and fluctuations in blood pressure have been reported. Although hypotension is rarely a problem, patients with pheochromocytoma, cerebral vascular or renal insufficiency or severe cardiac reserve deficiency such as mitral insufficiency appear to be particularly prone to this reaction and should be observed carefully. Supportive measures including intravenous vasopressor drugs should be instituted immediately should severe hypotension occur; Levarterenol Bitartrate Injection U.S.P. is the most suitable drug; *epinephrine should not be used* since phenothiazine derivatives have been found to reverse its action. Nausea, loss of appetite, salivation, polyuria, perspiration, dry mouth, headache and constipation may occur. Reducing or temporarily discontinuing the dosage will usually control these effects. Blurred vision, glaucoma, bladder paralysis, fecal impaction, paralytic ileus, tachycardia, or nasal congestion have occurred in some patients on phenothiazine derivatives.

Metabolic and Endocrine—Weight change, peripheral edema, abnormal lactation, gynecomastia, menstrual irregularities, false results on pregnancy tests, impotency in men and increased libido in women have occurred in some patients on phenothiazine therapy.

Allergic Reactions—Itching, erythema, urticaria, seborrhea, photosensitivity, eczema and exfoliative dermatitis have been reported with phenothiazines. The possibility of anaphylactoid reactions should be borne in mind.

Hematologic—Blood dyscrasias including leukopenia, agranulocytosis, thrombocytopenic or nonthrombocytopenic purpura, eosinophilia, and pancytopenia have been observed with phenothiazines. If soreness of the mouth, gums or throat or any symptoms of upper respiratory infection occur and confirmatory leukocyte count indicates cellular depression, therapy should be discontinued and other appropriate measures instituted immediately.

Hepatic—Liver damage manifested by cholestatic jaundice, particularly during the first months of therapy, may occur; treatment should be discontinued. A cephalin flocculation increase, sometimes accompanied by alterations in other liver function tests, has been reported in patients who have had no clinical evidence of liver damage.

Others—Sudden deaths have been reported in hospitalized patients on phenothiazines. Previous brain damage or seizures may be predisposing factors. High doses should be avoided in known seizure patients. Shortly before death, several patients showed flare-ups of psychotic behavior patterns. Autopsy findings have usually revealed acute fulminating pneumonia or pneumonitis, aspiration of gastric contents, or intramyocardial lesions. Although not a general feature of fluphenazine, potentiation of central nervous system depressants such as opiates, analgesics, antihistamines, barbiturates and alcohol may occur.

Systemic lupus erythematosus-like syndrome, hypotension severe enough to cause fatal cardiac arrest, altered electrocardiographic and electroencephalographic tracings, altered cerebrospinal fluid proteins, cerebral edema, asthma, laryngeal edema, and angioneurotic edema; with long-term use, skin pigmentation and lenticular and corneal opacities have occurred with phenothiazines. Local tissue reactions occur only rarely with injections of fluphenazine decanoate.

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The Rape Victim

by Elaine Hilberman, M.D.

Mythologies about rape are legion. However, in recent years behavioral scientists have accumulated a body of information about rape and about an unfolding series of reactions experienced by the victim after rape. The aim of this concise, tightly reasoned book is to summarize what is now known about the needs and experiences of the victim and her family, and to provide a framework in which the clinician can more knowledgeably supply assistance and support. This document, published by the American Psychiatric Association, is the result of a project of the Association's Committee on Women.

Pointing out that the profound impact of rape stress is best understood in the context of rape as "a crime against the person and not the hymen," Dr. Hilberman sees rape as the ultimate violation of the self short of homicide, as an act of violence and humiliation in which not only is the victim's very existence threatened, and her inner and most private space invaded, but her autonomy and control are totally demolished. Dr. Hilberman shows that if and when the victim reports the crime, she is confronted with a complex series of yet additional stresses growing out of her contact with the hospital, police, courts, media and community opinion. Additionally, her crisis differs from other crises in that her usual social support system is likely to be disrupted. Her immediate needs are for empathy and safety, and a sense of control over what is happening in her dealings with the several agencies. Dr. Hilberman shows that in the absence of sensitivity to these needs, the experience of reporting becomes another assault.

This book presents a professional, sobering, and balanced picture of the problems of the rape victim and details what the clinician must know—about local hospital policy, criminal justice procedure, rape statutes, and community attitudes and services—in order to be able to treat victims with an understanding of the larger context in which rape occurs.

ELAINE HILBERMAN, M.D., *is in the Department of Psychiatry at the University of North Carolina School of Medicine.*

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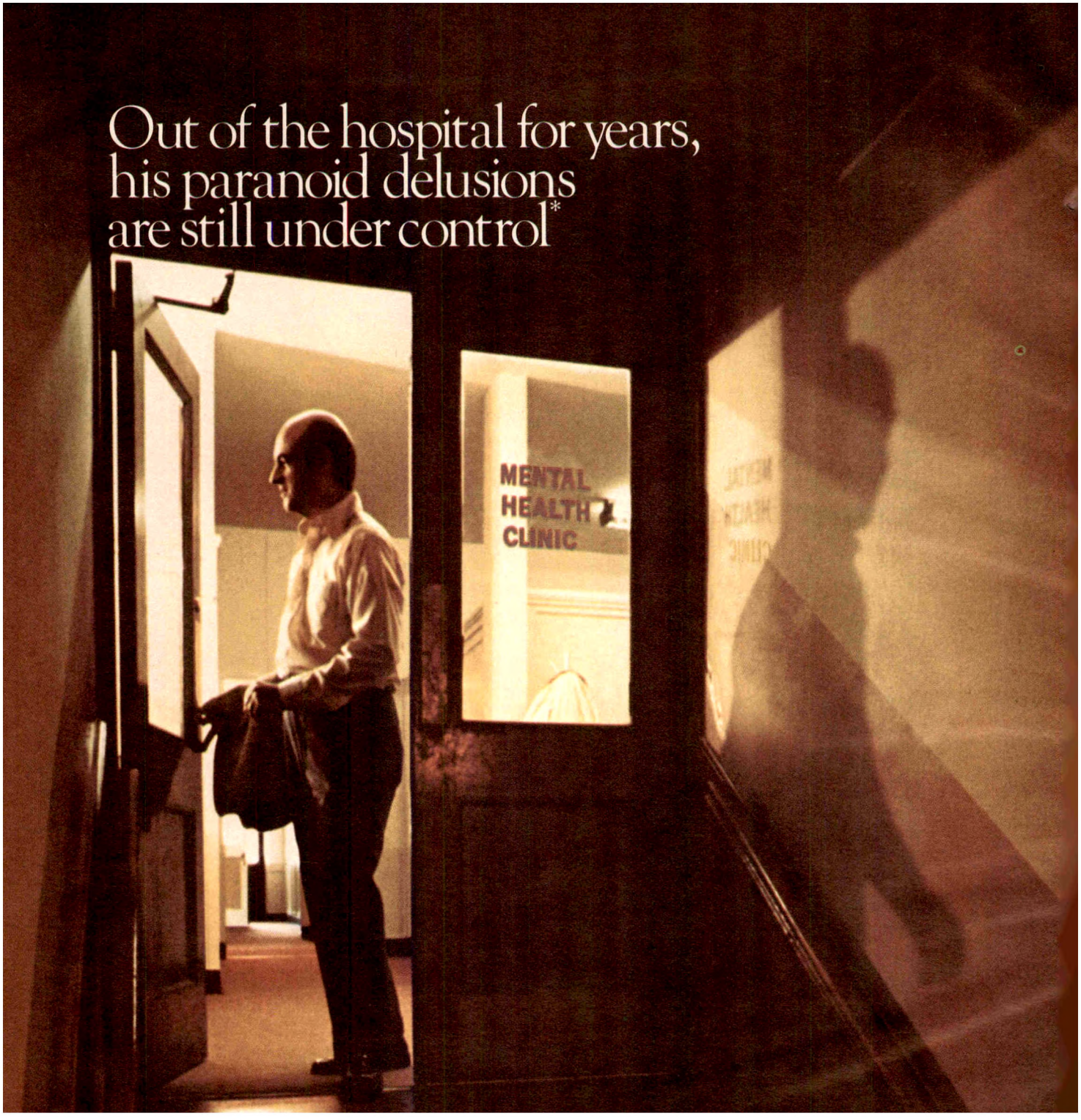
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Common side effects easily controlled.[1,3-6] Although extrapyramidal symptoms (EPS) have been reported frequently, they are usually dose-related and readily controlled with dose adjustment or antiparkinson drugs. EPS often diminish spontaneously with continued use of HALDOL haloperidol.

*Not an actual case history, this situation illustrates the action of HALDOL haloperidol as reported in various clinical studies (available on request).

Reduces risk of certain troublesome reactions.[2-5,7] Transient hypotension occurs rarely and severe orthostatic hypotension has not been reported. Marked sedation is rare, although some instances of drowsiness have been reported. In addition, with chronic use, it is unlikely to cause hepatic damage, serious hematologic reactions, photosensitivity reactions and skin rashes...and has minimal effect on renal function.

Please turn page for information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions.

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It is also indicated for the control of tics and vocal utterances of Gilles de la Tourette's syndrome.

Contraindications: HALDOL haloperidol is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy:*** Safe use of HALDOL haloperidol in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of haloperidol orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children: Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General: Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL haloperidol, decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL haloperidol may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL haloperidol should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, epinephrine should not be used since HALDOL haloperidol may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL haloperidol may lower the convulsive threshold. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant antiparkinson medication is required, it may have to be continued after HALDOL haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including antiparkinson agents, are administered concomitantly with HALDOL haloperidol. When HALDOL haloperidol is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose-related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of antiparkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Persistent Tardive Dyskinesia*—Tardive dyskinesia may appear during long-term therapy or after therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear irreversible. There is no known effective treatment. All antipsychotic agents should be discontinued. The syndrome may be masked by reinstitution of drug, increasing dosage, or switching to a different antipsychotic agent. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL haloperidol is administered or prescribed. 9-7

References:

1. Man, P.L.: Dis. Nerv. Syst. *34*:113 (Feb.) 1973. **2.** Sugerman, A.A. et al.: Am. J. Psychiatry *129*:1190 (June) 1964. **3.** Ayd, F.J., Jr.: Med. Sci. *18*:55 (Oct.) 1967. **4.** Howard, J.S.: Dis. Nerv. Syst. *35*:458 (Oct.) 1974. **5.** Abuzzahab, F.S., Sr.: Psychosomatics *11*:188 (May-June) 1970. **6.** Darling, H.F.: Dis. Nerv. Syst. *34*:364 (Oct.-Nov.) 1973. **7.** Gerle, B.: Clin. Trials J. *3*:380 (Feb.) 1966.

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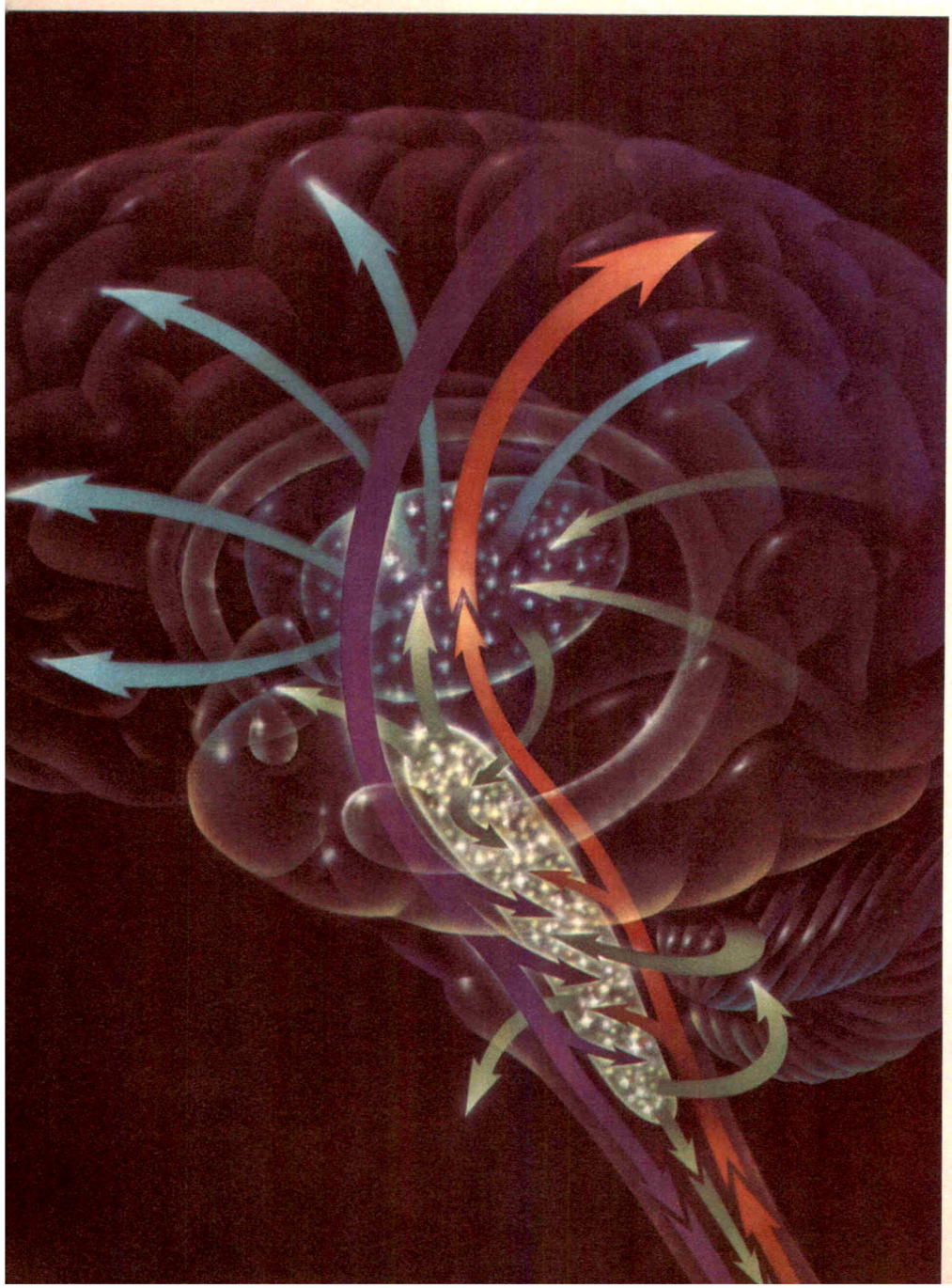
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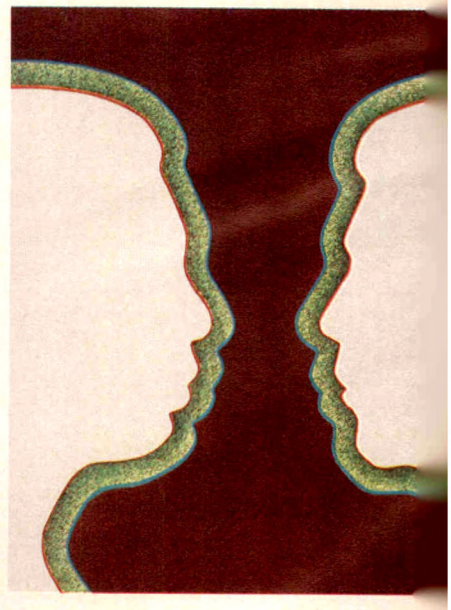
In treating the schizophrenic, there's something different about

MOBAN®
(molindone HCl)



acts on the RAS with low incidence of adverse effects

EEG studies show that MOBAN® exerts its effect on the ascending reticular activating system. This often helps to encourage increased social participation, receptivity and communication in schizophrenic patients.



Artist's representation of the reticular activating system, with neuronal activity passing on to cortical and subcortical structures.

generally minimizes drowsiness to help produce improved functioning
1) to hasten the discharge of hospitalized patients
2) to keep ambulatory patients at home or on the job

tranquilizes without muscle relaxant or incoordinating effect

acts to alleviate target symptoms or reduce their severity
1) in acute patients, some symptomatic improvement evident in a few days
2) in chronic patients, symptomatic improvement may not be evident until 2-4 weeks
3) maximum benefits attained by end of third month (continued maintenance therapy as required)

SOCIAL ADJUSTMENT PROFILE CHART

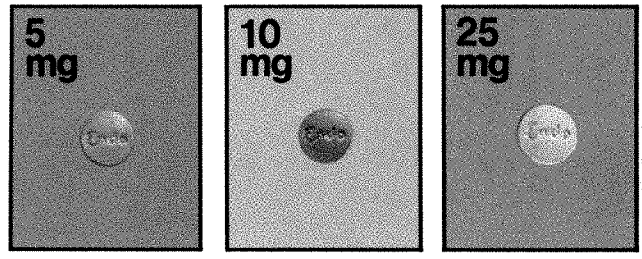
of 66 hospitalized schizophrenic patients treated with MOBAN® (molindone HCl) for 1 year or more*

Adjustment	Percent
To live on open ward	91%
To function with privileges	89%
To hold hospital job	85%
To leave hospital	70%
To maintain home	33%
To hold employment	32%

*ata on file, Endo Laboratories

How to use MOBAN® (molindone HCl)

a wide range of dosage strengths available in **Tablets:**



- Titrate for 1) therapeutic response and 2) minimal effective maintenance dose.
- Use lower doses for the elderly and debilitated.

NOTE: Transient drowsiness may occur during the first 1-2 weeks.

Whenever your schizophrenic patient may benefit from less sedation

MOBAN
(molindone HCl)

Please see last page of advertisement for full prescribing information.

Moban® is an Endo registered U.S. trademark; U.S. Pat. 3,491,093.

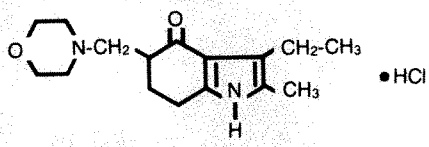
Endo Laboratories, Inc.
Subsidiary of E. I. du Pont de Nemours & Co. (Inc.)
Garden City, N.Y. 11530
DUPONT

MOBAN® (molindone HCl)

a dihydroindolone chemically distinct from phenothiazines, thioxanthenes, butyrophenones

DESCRIPTION MOBAN® (molindone hydrochloride) is a dihydroindolone compound which is not structurally related to the phenothiazines, the butyrophenones or the thioxanthenes.

MOBAN® is 3-ethyl-6, 7-dihydro-2-methyl-5-(morpholinomethyl) indol-4 (5H)-one hydrochloride. It is a white crystalline powder, freely soluble in water and alcohol and has a molecular weight of 312.67.



MOLINDONE HYDROCHLORIDE

ACTIONS MOBAN® (molindone hydrochloride) has a pharmacological profile in laboratory animals which predominantly resembles that of major tranquilizers causing reduction of spontaneous locomotion and aggressiveness, suppression of a conditional response and antagonism of the bizarre stereotyped behavior and hyperactivity induced by amphetamines. In addition, MOBAN® antagonizes the depression caused by the tranquilizing agent tetrabenazine.

In human clinical studies tranquilization is achieved in the absence of muscle relaxing or incoordinating effects. Based on EEG studies, MOBAN® exerts its effect on the ascending reticular activating system.

Human metabolic studies show MOBAN® (molindone hydrochloride) to be rapidly absorbed and metabolized when given orally. Unmetabolized drug reached a peak blood level at 1.5 hours. Pharmacological effect from a single oral dose persists for 24-36 hours. There are 36 recognized metabolites with less than 2-3% unmetabolized MOBAN® being excreted in urine and feces.

INDICATIONS MOBAN® (molindone hydrochloride) is indicated in the management of the manifestations of schizophrenia.

CONTRAINDICATIONS MOBAN® (molindone hydrochloride) is contraindicated in severe central nervous system depression (alcohol, barbiturates, narcotics, etc.) or comatose states, and in patients with known hypersensitivity to the drug.

WARNINGS Usage in Pregnancy: Studies in the pregnant patient have not been carried out. Reproduction studies have been performed in the following animals:

Pregnant Rats oral dose—	20 mg/kg/day—2 weeks
no adverse effect	
	40 mg/kg/day—2 weeks
no adverse effect	
Pregnant Mice oral dose—	20 mg/kg/day—9 days
slight increase resorptions	
	40 mg/kg/day—9 days
slight increase resorptions	
Pregnant Rabbits oral dose—	5 mg/kg/day—12 days
no adverse effect	
	10 mg/kg/day—12 days
no adverse effect	
	20 mg/kg/day—12 days
no adverse effect	

Animal reproductive studies have not demonstrated a teratogenic potential. The anticipated benefits must be weighed against the unknown risks to the fetus if used in pregnant patients.

Nursing Mothers: Data are not available on the content of MOBAN® (molindone hydrochloride) in the milk of nursing mothers.

Usage in Children: Use of MOBAN® (molindone hydrochloride) in children below the age of twelve years is not recommended because safe and effective conditions for its usage have not been established.

PRECAUTIONS Some patients receiving MOBAN® (molindone hydrochloride) may note drowsiness initially and they should be advised against activities requiring mental alertness until their response to the drug has been established.

Increased activity has been noted in patients receiving MOBAN®. Caution should be exercised where increased activity may be harmful.

MOBAN® does not lower the seizure threshold in experimental animals to the degree noted with more sedating antipsychotic drugs. However, convulsive seizures have been reported in a few instances.

The physician should be aware that this tablet preparation contains calcium sulfate as an excipient and that calcium ions may interfere with the absorption of preparations containing phenytoin sodium and tetracyclines.

MOBAN® has an antiemetic effect in animals. A similar effect may occur in humans and may obscure signs of intestinal obstruction or brain tumor.

ADVERSE REACTIONS CNS EFFECTS The most frequently occurring effect is initial drowsiness that generally subsides with continued usage of the drug or lowering of the dose.

Noted less frequently were depression, hyperactivity and euphoria.

Neurological

Extrapyramidal Reactions

Extrapyramidal reactions noted below may occur in susceptible individuals and are usually reversible with appropriate management.

Akathisia

Motor restlessness may occur early.

Parkinson Syndrome

Akinesia, characterized by rigidity, immobility and reduction of voluntary movements and tremor, have been observed. Occurrence is less frequent than akathisia.

Dystonic Syndrome

Prolonged abnormal contractions of muscle groups occur infrequently. These symptoms may be managed by the addition of a synthetic antiparkinson agent (other than L-dopa), small doses of sedative drugs, and/or reduction in dosage.

Autonomic Nervous System

Occasionally blurring of vision, tachycardia, nausea, dry mouth and salivation have been reported. Urinary retention and constipation may occur particularly if anticholinergic drugs are used to treat extrapyramidal symptoms.

Hematological

There have been rare reports of leucopenia and leucocytosis. If such reactions occur, treatment with MOBAN® may continue if clinical symptoms are absent. Alterations of blood glucose, liver function tests, B.U.N., and red blood cells have not been considered clinically significant.

Metabolic and Endocrine Effects

Alteration of thyroid function has not been significant. Amenorrhea has been reported infrequently. Resumption of menses in previously amenorrheic women has been reported. Initially heavy menses may occur. Lactation associated with MOBAN® therapy has not been reported. Increase in libido has been noted in some patients. Impotence has not been reported. Although both weight gain and weight loss have been in the direction of normal or ideal weight, excessive weight gain has not occurred with MOBAN®.

Cardiovascular

Rare, transient, non-specific T wave changes have been reported on E.K.G. Association with a clinical syndrome has not been established. Rarely has significant hypotension been reported.

Ophthalmological

Lens opacities and pigmentary retinopathy have not been reported where patients have received MOBAN® (molindone hydrochloride). In some patients, phenothiazine induced lenticular opacities have resolved following discontinuation of the phenothiazine while continuing therapy with MOBAN®.

Skin

Early, non-specific skin rash, probably of allergic origin, has occasionally been reported. Skin pigmentation has not been seen with MOBAN® usage alone.

MOBAN® (molindone hydrochloride) has certain pharmacological similarities to other antipsychotic agents. Because adverse reactions are often extensions of the pharmacological activity of a drug, all of the known pharmacological effects associated with other antipsychotic drugs should be kept in mind when MOBAN® is used. Upon abrupt withdrawal after prolonged high dosage an abstinence syndrome has not been noted.

Tardive Dyskinesia

Although not reported with MOBAN® (molindone hydrochloride) late appearing dyskinesias have been associated with certain antipsychotic agents.

Tardive dyskinesia associated with other agents has appeared in some patients on long-term therapy and has also appeared after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). There may be involuntary movements of extremities.

There is no known effective treatment of tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time the syndrome may not develop.

DOSAGE AND ADMINISTRATION Initial and maintenance doses of MOBAN® (molindone hydrochloride) should be individualized, and the minimal effective dose should be employed. Elderly and debilitated patients should be started on lower dosage.

DOSAGE SCHEDULE, BASED ON SEVERITY OF SYMPTOMATOLOGY

1. Mild—5 mg three or four times a day; an increase to 15 mg three or four times a day may be required.
2. Moderate—10 mg three or four times a day; an increase to 25 mg three or four times a day may be required.
3. Severe—daily dosage as high as 225 mg may be required.

DRUG INTERACTIONS Potentiation of drugs administered concurrently with MOBAN® (molindone hydrochloride) has not been reported. Additionally, animal studies have not shown increased toxicity when MOBAN® is given concurrently with representative members of three classes of drugs (i.e., barbiturates, chloral hydrate and antiparkinson drugs).

MANAGEMENT OF OVERDOSAGE Symptomatic, supportive therapy should be the rule.

Gastric lavage is indicated for the reduction of absorption of MOBAN® (molindone hydrochloride) which is freely soluble in water.

Since the adsorption of MOBAN® (molindone hydrochloride) by activated charcoal has not been determined, the use of this antidote must be considered of theoretical value.

Emesis in a comatose patient is contraindicated. Additionally, while the emetic effect of apomorphine is blocked by MOBAN® in animals, this blocking effect has not been determined in humans.

A significant increase in the rate of removal of unmetabolized MOBAN® from the body by forced diuresis, peritoneal or renal dialysis would not be expected. (Only 2% of a single ingested dose of MOBAN® is excreted unmetabolized in the urine.)

However, poor response of the patient may justify use of these procedures. While the use of laxatives or enemas might be based on general principles, the amount of unmetabolized MOBAN® in feces is less than 1%. Extrapyramidal symptoms have responded to the use of diphenhydramine (Benadryl*) and the synthetic anticholinergic antiparkinson agents (i.e., Artane*, Cogentin*, Akineton*).

HOW SUPPLIED As tablets in bottles of 100 and 1000 with potencies and colors as follows: 5 mg orange, 10 mg lavender, 25 mg light green.

*Benadryl—Trademark, Parke Davis and Co.
*Artane—Trademark, Lederle Laboratories
*Cogentin—Trademark, Merck Sharp & Dohme
*Akineton—Trademark, Knoll Pharmaceutical Co.

Endo Laboratories, Inc.
Subsidiary of E.I. du Pont de Nemours & Co. (Inc.)
Garden City, N.Y. 11530
DUPONT

SINEQUAN®
DOXEPIN HCl

100-mg., 50-mg., 25-mg. Capsules and ORAL CONCENTRATE 10 mg./ml., 120-ml. (4-oz.) bottles

MAY BE AN APPROPRIATE CHOICE FOR YOUR NEXT PATIENT WITH CLINICAL DEPRESSION

See Brief Summary on last page of advertisement for information on adverse reactions, contraindications, warnings and precautions.

SINEQUAN®
DOXEPIN HCl

100-mg., 50-mg., 25-mg. Capsules and
ORAL CONCENTRATE 10 mg./ml., 120-ml. (4-oz.) bottles

Proved efficacy in the treatment of clinical depression

In the six years since its introduction, Sinequan (doxepin HCl) has objectively demonstrated its value in the treatment of clinical depression. Clinical studies have shown Sinequan to be unsurpassed in effectiveness when compared to other tricyclic antidepressants.

In addition, Sinequan may offer certain advantages not generally seen with some other drugs of its class:

Prompt sedative activity

Of the tricyclic antidepressants, Sinequan has been found to have one of the most prominent sedative effects.[1] This sedative property can be taken advantage of by administering the major portion of the daily dose *h.s.* Since clinically depressed patients frequently have accompanying sleep disturbances, this may be a valuable benefit.

Generally does not affect the activity of guanethidine at usual clinical doses[2]

"A new tricyclic antidepressant, doxepin, was evaluated for its ability to block the amine uptake mechanisms of the peripheral adrenergic neuron and blood platelet in man. At low doses, there was no evidence of inhibition of the amine pump." At clinical dosages up to 150 mg. per day, Sinequan can be given to man concomitantly with guanethidine and related compounds without blocking the antihypertensive effect.[2]

Cardiovascular effects, including hypotension and tachycardia, have been reported occasionally

In a series of double-blind comparative studies, 1,706 doxepin-treated patients were evaluated for side effects. Incidence of tachycardia was associated with only 45 (2.6%) clinically depressed/anxious patients. Incidence of symptomatic hypotension was associated with only 48 (2.8%) clinically depressed/anxious patients.[3]

REFERENCES:
1. Claghorn, J.L., in Claghorn, J.L. et al.: Patient Care 5:108, Oct. 15, 197
2. Fann, W. E. et al.: Psychopharmacologia 22:111, 1971.
3. Pitts, N. E.: Psychosomatics 10:164, May-June 1969.

See Brief Summary on last page of advertisement for information on adverse reactions, contraindications, warnings and precautions.

DIAGNOSTIC EVALUATION FORM

NAME_____ DATE_____

Date and Place of Birth_____ Age_____ Marital Status_____

Home Address_____ Telephone_____

Business Address_____ Telephone_____

Spouse or Nearest Relative_____ Relationship_____

Address_____ Telephone_____

Referred by_____

CHIEF COMPLAINT:

PRESENT ILLNESS:

PAST HISTORY:

FAMILY HISTORY:



MAY BE AN APPROPRIATE CHOICE FOR YOUR NEXT CLINICALLY DEPRESSED PATIENT

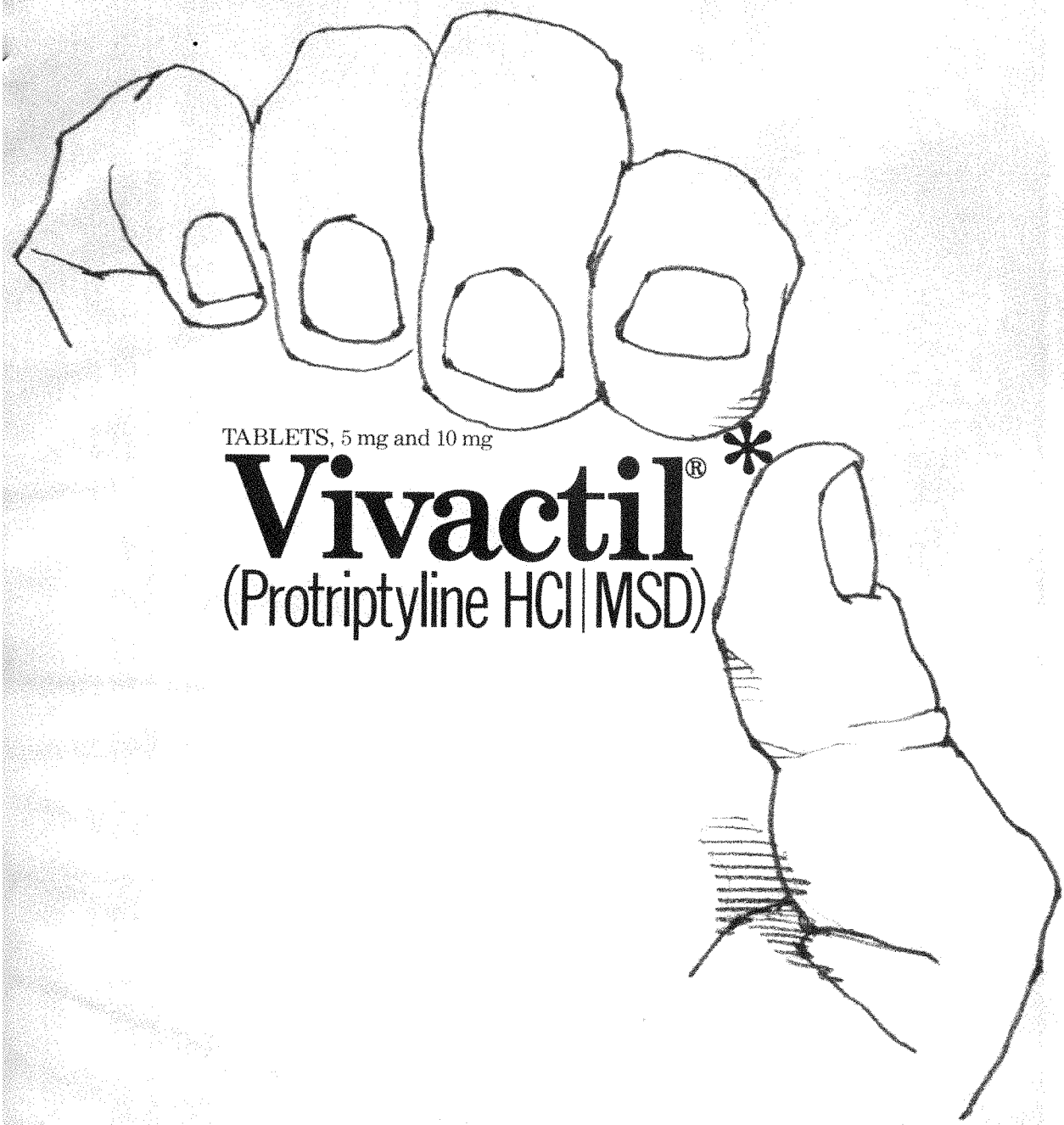
SINEQUAN®
DOXEPIN HCl

100-mg., 50-mg., 25-mg. Capsules and
ORAL CONCENTRATE 10 mg./ml., 120-ml. (4-oz.) bottles

BRIEF SUMMARY
SINEQUAN® (doxepin HCl) Capsules/Oral Concentrate
Contraindications. Contraindicated in individuals who have shown hypersensitivity to the drug, and in patients with glaucoma or a tendency to urinary retention. Possibility of cross sensitivity with other dibenzoxepines should be kept in mind.
Warnings. The once-a-day dosage regimen of SINEQUAN in patients with intercurrent illness or patients taking other medications should be carefully adjusted. This is especially important in patients receiving other medications with anticholinergic effects.
Usage in Geriatrics: The use of SINEQUAN on a once-a-day dosage regimen in geriatric patients should be adjusted carefully based on the patient's condition.
Usage in Pregnancy: Reproduction studies performed in animals have shown no evidence of harm to the animal fetus. Since there is no experience in pregnant women receiving this drug, safety in pregnancy has not been established. There are no data with respect to the secretion of the drug in human milk and its effect on the nursing infant.
Usage in Children: Usage in children under 12 years of age is not recommended because safe conditions for its use have not been established.
MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with this drug. The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered and the dosage involved.
Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug. Patients should also be cautioned that their response to alcohol may be potentiated.
Since suicide is an inherent risk in any depressed patient, and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.
Should increased symptoms of psychosis or shift to manic symptomatology occur, it may be necessary to reduce dosage or add a major tranquilizer to the dosage regimen.
Adverse Reactions. NOTE: Some of the adverse reactions noted below have not been specifically reported with SINEQUAN use. However, due to the close pharmacological similarities among the tricyclics, the reactions should be considered when prescribing SINEQUAN.
Anticholinergic Effects: Dry mouth, blurred vision, constipation, and urinary retention have been reported. If they do not subside with continued therapy, or become severe, it may be necessary to reduce the dosage.
Central Nervous System Effects: Drowsiness is the most commonly noticed side effect. This tends to disappear as therapy is continued. Other infrequently reported CNS side effects are confusion, disorientation, hallucinations, numbness, paresthesias, ataxia, extrapyramidal symptoms and seizures.
Cardiovascular: Cardiovascular effects including hypotension and tachycardia have been reported occasionally.
Allergic: Skin rash, edema, photosensitization, and pruritus have occasionally occurred.
Hematologic: Eosinophilia has been reported in a few patients. There have been occasional reports of bone marrow depression manifesting as agranulocytosis, leukopenia, thrombocytopenia, and purpura.
Gastrointestinal: Nausea, vomiting, indigestion, taste disturbances, diarrhea, anorexia, and aphthous stomatitis have been reported. (See anticholinergic effects.)
Endocrine: Raised or lowered libido, testicular swelling, gynecomastia in males, enlargement of breasts and galactorrhea in the female, raising or lowering of blood sugar levels have been reported with tricyclic administration.
Other: Dizziness, tinnitus, weight gain, sweating, chills, fatigue, weakness, flushing, jaundice, alopecia, and headache have been occasionally observed as adverse effects.
Dosage and Administration. For most patients with illness of mild to moderate severity, a starting dose of 25 mg t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg/day to 150 mg/day.
In more severely ill patients an initial dose of 50 mg t.i.d. may be required with subsequent gradual increase to 300 mg/day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg/day.
In patients with very mild symptomatology or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg/day.
As an alternative regimen, the total daily dosage, up to 150 mg, may be given on a once-a-day schedule without loss of effectiveness. This dose may be given at bedtime.
Anti-anxiety effect is apparent before the antidepressant effect. Optimal antidepressant effect may not be evident for two to three weeks.
Overdosage. A. Signs and Symptoms
1. Mild: Drowsiness, stupor, blurred vision, excessive dryness of mouth.
2. Severe: Respiratory depression, hypotension, coma, convulsions, cardiac arrhythmias and tachycardias.
Also: urinary retention (bladder atony), decreased gastrointestinal motility (paralytic ileus), hyperthermia (or hypothermia), hypertension, dilated pupils, hyperactive reflexes.
B. Management and Treatment
1. Mild: Observation and supportive therapy is all that is usually necessary.
2. Severe: Medical management of severe SINEQUAN overdosage consists of aggressive supportive therapy. If the patient is conscious, gastric lavage, with appropriate precautions to prevent pulmonary aspiration, should be performed even though SINEQUAN is rapidly absorbed. The use of activated charcoal has been recommended, as has been continuous gastric lavage with saline for 24 hours or more. An adequate airway should be established in comatose patients and assisted ventilation used if necessary. EKG monitoring may be required for several days, since relapse after apparent recovery has been reported. Arrhythmias should be treated with the appropriate antiarrhythmic agent. It has been reported that many of the cardiovascular and CNS symptoms of tricyclic antidepressant poisoning in adults may be reversed by the slow intravenous administration of 1 mg to 3 mg of physostigmine salicylate. Because physostigmine is rapidly metabolized, the dosage should be repeated as required. Convulsions may respond to standard anticonvulsant therapy; however, barbiturates may potentiate any respiratory depression. Dialysis and forced diuresis generally are not of value in the management of overdosage due to high tissue and protein binding of SINEQUAN.
Supply. Available as capsules containing doxepin HCl equivalent to 10 mg, 25 mg, 50 mg, and 100 mg doxepin in bottles of 100, 1000, and unit-dose packages of 100 (10 x 10's). SINEQUAN (doxepin HCl) 25 mg and 50 mg are also available in bottles of 5000. SINEQUAN Oral Concentrate is available in 120 ml bottles with an accompanying dropper calibrated at 5 mg, 10 mg, 15 mg, 20 mg, and 25 mg. Each ml contains doxepin HCl equivalent to 10 mg doxepin. Just prior to administration, SINEQUAN Oral Concentrate should be diluted with approximately 120 ml of water, whole or skimmed milk, or orange, grapefruit, tomato, prune or pineapple juice. SINEQUAN Oral Concentrate is not physically compatible with a number of carbonated beverages. For those patients requiring antidepressant therapy who are on methadone maintenance, SINEQUAN Oral Concentrate and methadone syrup can be mixed together with Gatorade®, lemonade, orange juice, sugar water, Tang®, or water; but not with grape juice. Preparation and storage of bulk dilutions is not recommended.
More detailed professional information available on request.

Pfizer **LABORATORIES DIVISION**
PFIZER INC.

In clinically significant depression



TABLETS, 5 mg and 10 mg

Vivactil®*

(Protriptyline HCl | MSD)

***When you want an antidepressant hat is characteristically nonsedating for he patient under close medical supervision Symptoms such as anxiety or agitation nay be aggravated.)**

r a brief summary of prescribing information please see following page.

MSD
MERCK SHARP & DOHME

In clinically significant depression

TABLETS, 5 mg and 10 mg

Vivactil®

(Protriptyline HCl|MSD)

Contraindications: Known hypersensitivity; acute recovery phase following myocardial infarction. Should not be given concomitantly with an MAOI; hyperpyretic crises, severe convulsions, and deaths have occurred in patients receiving tricyclic antidepressant and MAOI drugs simultaneously. When it is desired to substitute protriptyline HCl for an MAOI, a minimum of 14 days should be allowed to elapse after the latter is discontinued. Protriptyline HCl should then be initiated cautiously with gradual increase in dosage until optimum response is achieved.

Warnings: May block the antihypertensive effect of guanethidine or similarly acting compounds. May impair mental and/or physical abilities required for the performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Should be used with caution in patients with a history of seizures and, because of its autonomic activity, in patients with a tendency to urinary retention or increased intraocular tension.

Tachycardia and postural hypotension may occur more frequently than with other antidepressant drugs. Should be used with caution in elderly patients and patients with cardiovascular disorders; such patients should be observed closely because of the tendency of the drug to produce tachycardia, hypotension, arrhythmias, and prolongation of the conduction time. Myocardial infarction and stroke have occurred with drugs of this class. On rare occasions, hyperthyroid patients or those receiving thyroid medication may develop arrhythmias when this drug is given.

Usage in Children: Not recommended for use in children because safety and effectiveness in the pediatric age group have not been established.

Usage in Pregnancy: Safe use in pregnancy and lactation has not been established; therefore, use in pregnant women, nursing mothers, or women who may become pregnant requires that possible benefits be weighed against possible hazards to mother and child.

Precautions: When protriptyline HCl is used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; likewise, in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase; paranoid delusions, with or without associated hostility, may be exaggerated. In any of these circumstances, it may be advisable to reduce the dose of protriptyline HCl or to use a major tranquilizing drug concurrently. Symptoms, such as anxiety or agitation, may be aggravated in overactive or agitated patients.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. May enhance response to alcohol and effects of barbiturates and other CNS depressants. Possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent administration with electroshock therapy may increase hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue drug several days before elective surgery, if possible. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions which have not been reported with this specific drug. However, the pharmacologic similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when protriptyline HCl is administered. Protriptyline HCl is more likely to aggravate agitation and anxiety and produce cardiovascular reactions such as tachycardia and hypotension.

Cardiovascular: hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: confusional states (especially in the elderly) with hallucinations, disorientation, delusions, anxiety, restlessness, agitation; insomnia, panic, and nightmares; hypomania; exacerbation of psychosis.

Neurological: numbness, tingling, and paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns, tinnitus.

Anticholinergic: dry mouth and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilatation of the urinary tract.

Allergic: skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight), edema (general, or of face and tongue), drug fever.

Hematologic: bone marrow depression; agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia.

Gastrointestinal: nausea and vomiting, anorexia, epigastric distress, diarrhea, peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency, nocturia; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache, and malaise.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of other tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets, containing 5 mg and 10 mg protriptyline HCl each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information.

Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

MSD
MERCK SHARP & DOHME

Psychiatrist — Chairperson for School of Medicine Department of Psychiatry — State University of New York at Buffalo

Applicants must be graduates of an approved medical school and be certified by the American Board of Psychiatry. Must have established academic background, administrative ability and interest in teaching. Opportunity to develop a broadly-based clinically oriented Psychiatry Program with multi-institutional approach. Present Department has strong Ph.D. psychologist group and interfaces with an excellent University Psychology Department. Appointee would be expected to reorganize the Department with emphasis on recruitment of clinical faculty, residency program development, medical student instruction and interface with the Psychiatry Community. Send curriculum vitae to Dr. John R. Wright, Chairman of Search Committee for Chairperson of Department of Psychiatry. C/O Department of Pathology, 204 Farber Hall, State University of New York at Buffalo, Buffalo, New York 14214. The State University of New York at Buffalo is an equal opportunity affirmative action employer and welcomes applications from minorities and women.

POSITIONS AVAILABLE

Mental Health Facility Director

Unusual opportunity to function as Director of Modern Community based Mental Health Center in Bridgeport, Connecticut.

Board certified psychiatrists or those with a degree in Mental hospital administration or hospital administration certified by the A.P.A. are invited to apply. Salary $30,123 to $35,571.

Clinical Director (Forensic)

Responsible for the total medical/psychiatric care in a specialized treatment facility, centrally located in Middletown, Connecticut.

A unique opportunity is offered to a qualified, board certified applicant with Forensic training or experience. Salary $30,123 to $35,571.

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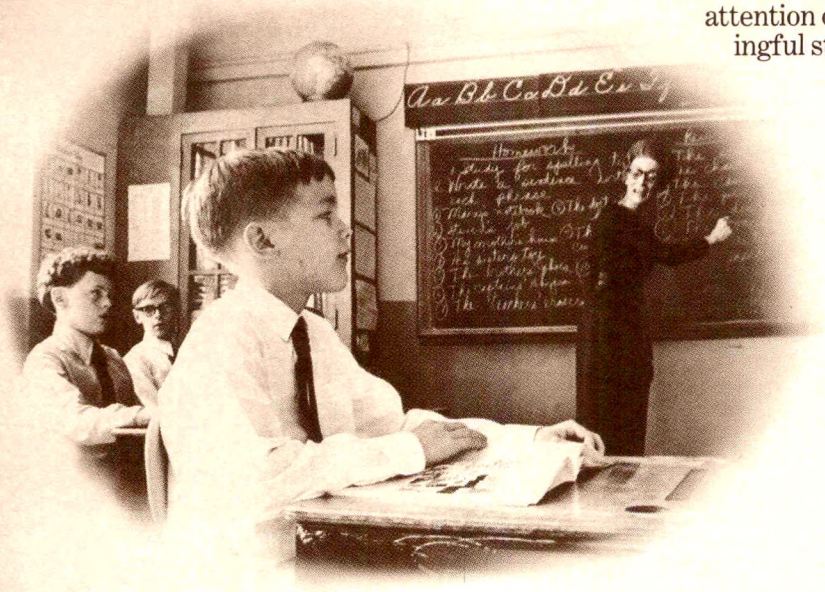
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Tested by time and experience in

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"...a considerable decrease of hyperactivity...."[1]
Knobel, 1962



Over a decade of controlled studies and clinical experience has shown the effectiveness of Ritalin in reducing the hyperactivity,[1-3] distractibility,[1,4,5] and disorganized behavior[1-8] in the MBD child.

By lessening the effects of motor and attentional disorders, Ritalin can help the MBD child to better focus his attention on meaningful stimuli and thus can often improve cognition and promote learning.[6,9]

And side effects – insomnia and appetite loss – with Ritalin have occurred less frequently than with dextroamphetamine.[10,11]

Indeed, Ritalin is currently a drug of choice in many MBD situations,[10,12] and can prove to be an important element in many complete remedial programs for MBD.

Therapy with Ritalin should be undertaken only after a medical diagnosis of MBD has been made. Drug treatment is not indicated for all children with MBD.

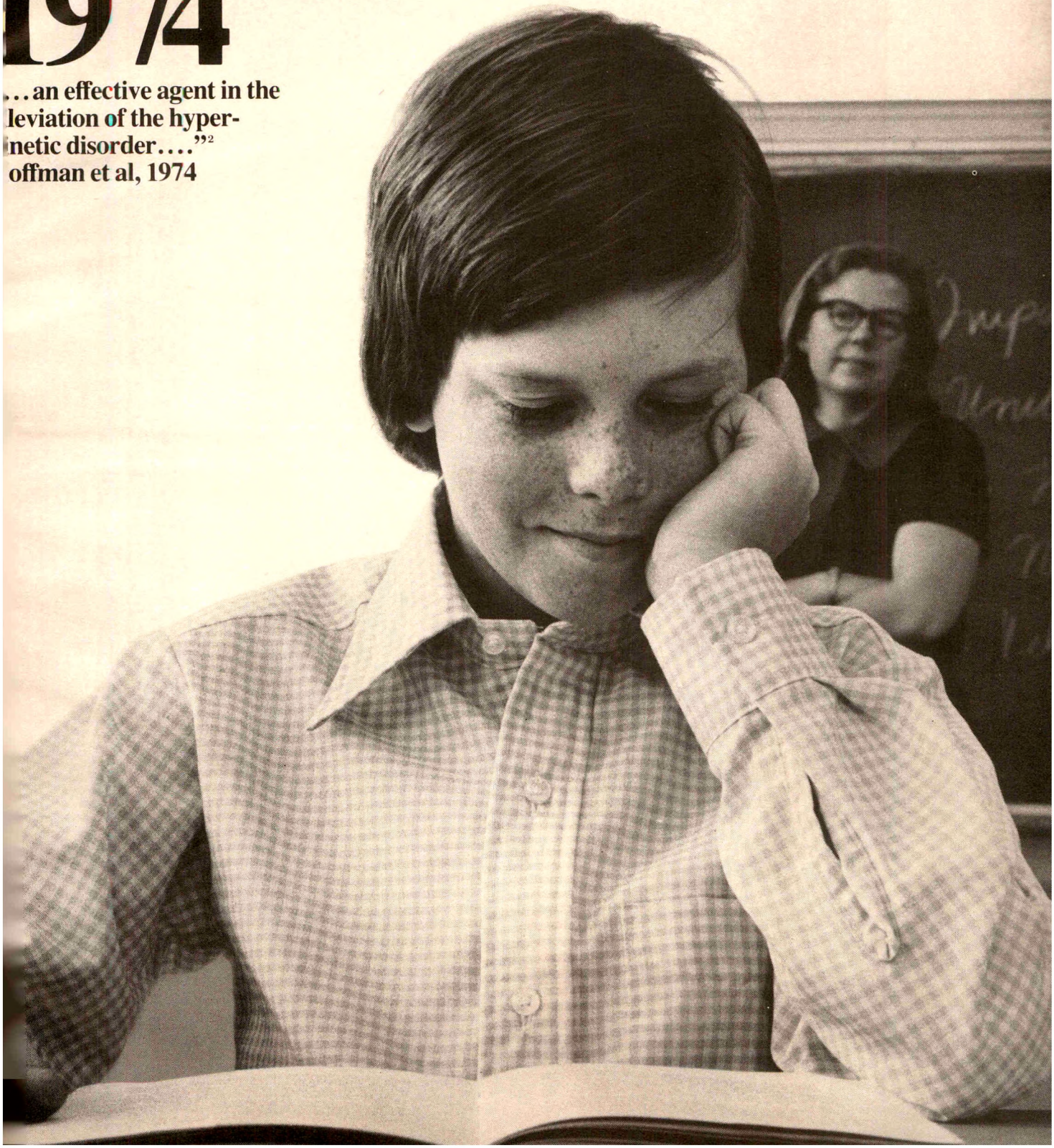
Dosage should be periodically interrupted. Often, these interruptions reveal some "stabilization" in the child's behavior even without medication, permitting a reduction in dosage and eventual discontinuance of drug therapy.

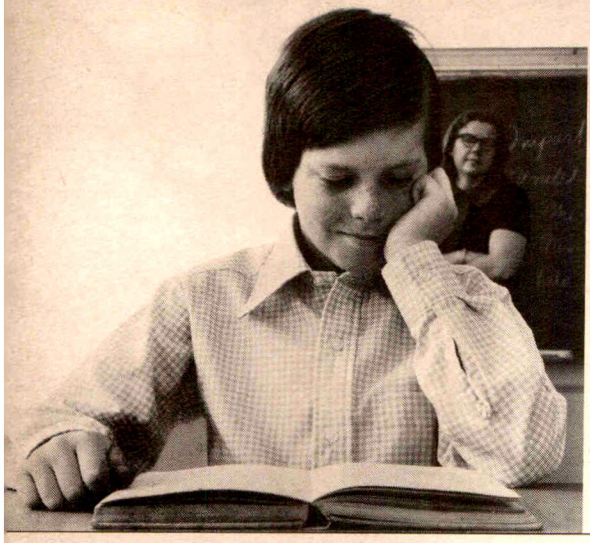
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Only when medication is indicated

the treatment of MBD

1974

...an effective agent in the
leviation of the hyper-
inetic disorder...."[2]
offman et al, 1974





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TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources. Characteristics commonly reported include: chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; minor neurological signs and abnormal EEG. Learning may or may not be impaired. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis. Appropriate educational placement is essential and psychosocial intervention is generally necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin should not be used in children under six years, since safety and efficacy in this age group have not been established.

Sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available.

Although a causal relationship has not been established, suppression of growth (*ie*, weight gain and/or height) has been reported with long-term use of stimulants in children. Therefore, children requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.

Symptoms of visual disturbances have been encountered in rare cases. Difficulties with accommodation and blurring of vision have been reported.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative. Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary. Periodic CBC, differential, and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported. Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: leukopenia and/or anemia; a few instances of scalp hair loss.

In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, or, if necessary, discontinue the drug.

Ritalin should be periodically discontinued to assess the child's condition. Improvement may be sustained when the drug is either temporarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 100 and 1000.

Tablets, 10 mg (pale green, scored); bottles of 100, 500, 1000 and Accu-Pak® blister units of 100.

Tablets, 5 mg (pale yellow); bottles of 100, 500 and 1000.

Consult complete product literature before prescribing.

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(loxapine succinate)

extensively investigated clinically

Loxapine succinate [Daxolin] has been studied clinically in both chronic and acute schizophrenic patients for over six years.[1-11]

evaluated by psychiatrists—BPRS (Brief Psychiatric Rating Scale), CGI (Clinical Global Impression)

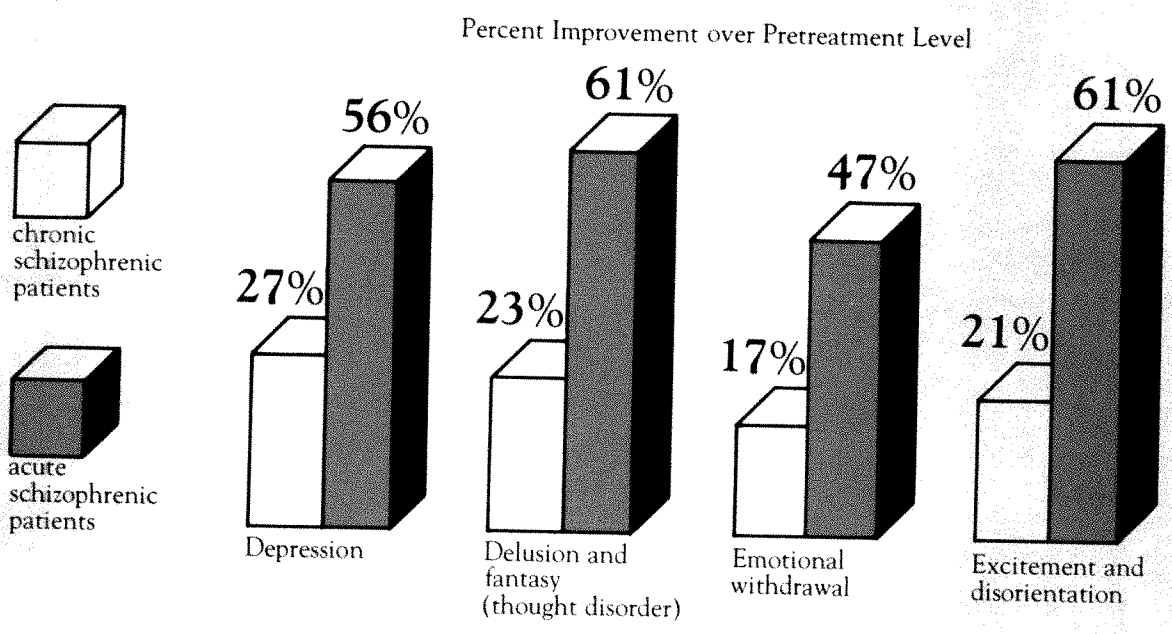
evaluated by psychiatric nurses—NOSIE (Nurse's Observation Scale for Inpatient Evaluation)

evaluated by patients—SRSS (Self-Rating Symptom Scale)

compared with various other agents including chlorpromazine, trifluoperazine, doxepin, thiothixene, as well as placebo—from 11 published, controlled/double-blind studies involving 482 patients[1-11]

helps control symptoms of acute and chronic schizophrenia

Evaluation (by BPRS) of symptomatic response in 221 chronic and acute schizophrenic patients[12]



- ☐ significant improvement noted in behavior patterns, severity of symptoms significantly reduced
- ☐ helps control major target symptoms in responsive patients
- ☐ dosage strengths to meet individual needs
- ☐ adverse CNS manifestations—other than extrapyramidal reactions—infrequent*

***See "Adverse Reactions" section in the prescribing information on last page.**

and...

second... help for those close to the schizophrenic

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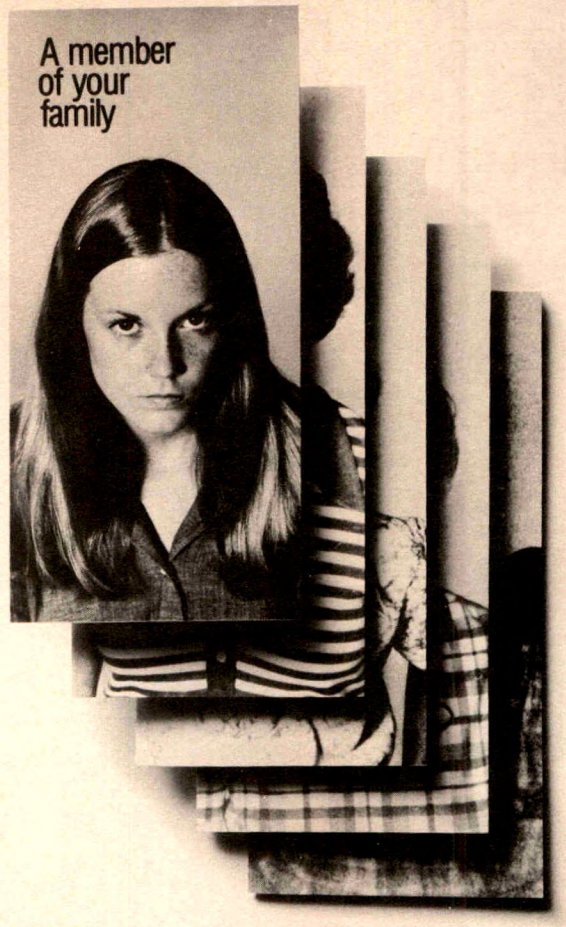
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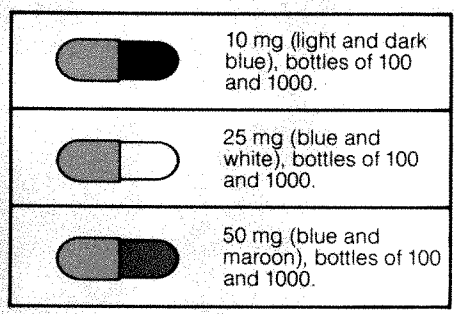
Daxolin™
(loxapine succinate)

a promising neuroleptic agent for symptomatic control of schizophrenia

See next page for prescribing information.

Daxolin™ (loxapine succinate)

individualized dosage strengths to meet the varying needs of the schizophrenic



10 mg (light and dark blue), bottles of 100 and 1000.

25 mg (blue and white), bottles of 100 and 1000.

50 mg (blue and maroon), bottles of 100 and 1000.

Description: DAXOLIN (loxapine succinate), a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl) dibenz[b,f][1,4] oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg of loxapine succinate is equivalent to 1 mg of loxapine.

Actions: Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar onset and duration of primary pharmacologic effect was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates but are unconjugated in the feces.

Indications: DAXOLIN is indicated for the manifestations of schizophrenia.

Contraindications: DAXOLIN (loxapine succinate) is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.).

DAXOLIN is contraindicated in individuals with known hypersensitivity to the drug.

Warnings: *Usage in Pregnancy:* Safe use of DAXOLIN during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratogenicity was observed in studies in rats, rabbits or dogs. With the exception of one rabbit study, the highest dosage was two times the maximum recommended human dose and in some studies the dose was lower. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

DAXOLIN, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

Precautions: DAXOLIN should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving DAXOLIN at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect also may occur in man, loxapine may mask signs of overdosage of toxic drugs and obscure conditions such as intestinal obstruction and brain tumor.

DAXOLIN should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; and transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinsonian medication.

Adverse Reactions: *CNS Effects:* Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased. It usually subsides with continued DAXOLIN (loxapine succinate) therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of DAXOLIN have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved parkinsonism-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of DAXOLIN dosage or by administration of antiparkinsonian drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreoathetoid movements. These reactions sometimes require reduction or temporary withdrawal of DAXOLIN dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—In keeping with the action of all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients—especially females—on high-dose therapy. The symptoms are persistent and, in some patients, appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of the extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonian agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome; if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, light-headedness, and syncope have been reported. A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin Effects: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinsonian agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

Dosage and Administration: DAXOLIN (loxapine succinate) is administered orally, usually in divided doses, two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended although, in severely disturbed patients, initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

How Supplied: DAXOLIN™ (loxapine succinate) is supplied in the following base-equivalent strengths:

CAPSULES Hard Shell Printed "DOME"

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References: 1. Van der Velde CD, Kiltie H: *Curr Ther Res* 17:1-12, 1975. **2.** Gallant DM, et al: *Curr Ther Res* 15:205-209, 1973. **3.** Cooperative Study, Psychopharmacology Research Branch, NIMH: *J Clin Pharmacol* 10:175-181, 1970. **4.** Clark ML, et al: *J Clin Pharmacol* 15:286-294, 1975. **5.** Bishop MP, Gallant DM: *Curr Ther Res* 12:594-597, 1970. **6.** Charalampous KD, et al: *Curr Ther Res* 16:829-837, 1974. **7.** Gershon S, et al: *Curr Ther Res* 12:280-285, 1970. **8.** Steinbook RM, et al: *Curr Ther Res* 15:1-7, 1973. **9.** Shopsin B, et al: *Curr Ther Res* 14:739-748, 1972. **10.** Charalampous KD, Freemesser GF, Smalling KF: *J Clin Pharmacol* 14:464-469, 1974. **11.** Clark ML, et al: *Dis Nerv Syst* 33:783-791, 1972. **12.** Data on file, Medical Research Department, Dome Laboratories.

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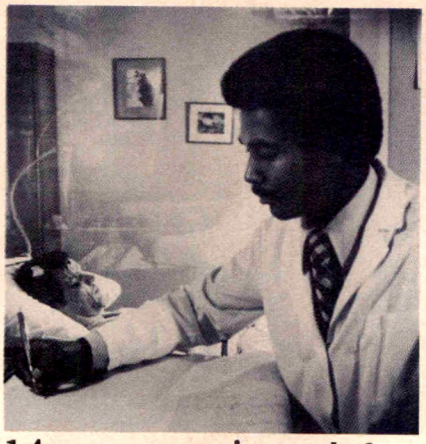
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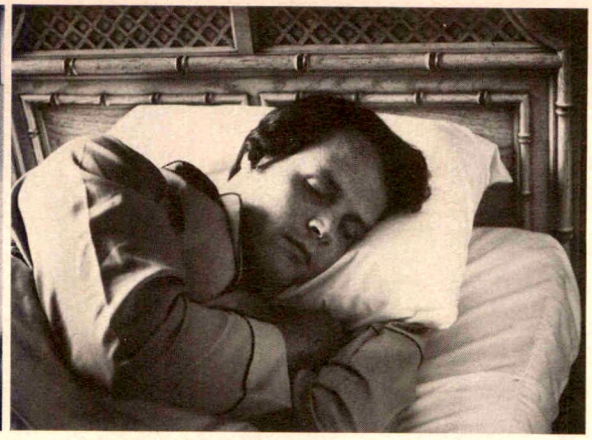
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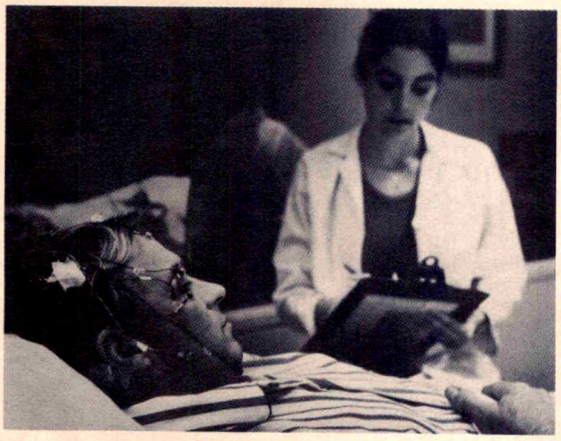
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3 in sleep laboratory, 8 at home,
3 in sleep laboratory

...and now, the only one proven effective over 28 nights.[2,3]



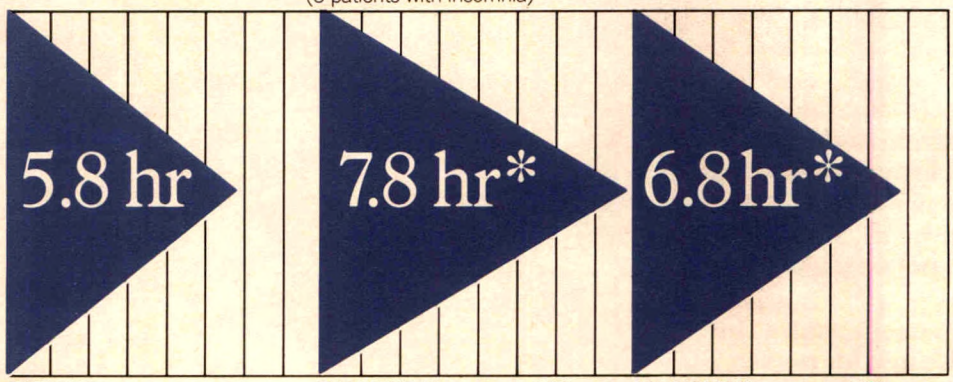


28 consecutive nights:
3 in sleep laboratory, 7 at home,
4 in sleep laboratory, 10 at home,
4 in sleep laboratory[3]

For those patients who need it, Dalmane (flurazepam HCl) alone provides continued effectiveness[2,3]

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But for those patients whose insomnia is a chronic problem, the continued effectiveness of Dalmane is a decided benefit. Even at the end of a 28-night medication period, patients with chronic insomnia were falling asleep faster, spending less time awake during the night, and sleeping substantially longer on Dalmane 30 mg *h.s.* than on baseline placebo nights (average results). This effectiveness was proved[2] and confirmed[3] in two independent sleep research studies using a new 47-night protocol. When similarly evaluated, pentobarbital was ineffective at the end of two weeks.[2]

TOTAL SLEEP TIME (MEAN)[3]
(5 patients with insomnia)



*Significantly increased over baseline placebo ($P < .05$).

In previous studies[1] chloral hydrate and glutethimide lost most or all effectiveness

In fact, continued effectiveness for both inducing and maintaining sleep over 14 consecutive nights[1] has long been an exclusive benefit of Dalmane. No other available sleep agent, including chloral hydrate or glutethimide,[1] has been able to demonstrate such effectiveness in the sleep research laboratory.

The safety record of Dalmane (flurazepam HCl) is well established

Dalmane is relatively safe and well tolerated. Prolonged administration is not generally necessary, but if used repeatedly, periodic blood counts and liver and kidney function tests should be performed.

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(flurazepam HCl)

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relatively safe... no need to increase dosage.

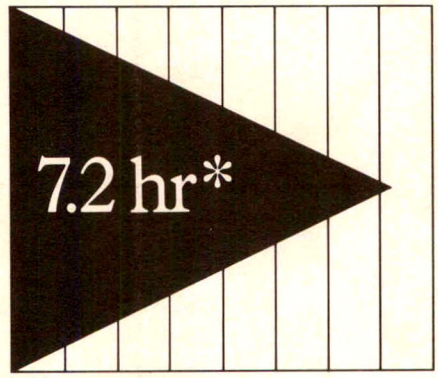
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1,5,7,14,28 nights... as needed, the effectiveness of **Dalmane**® one *h.s.* (flurazepam HCl) Ⓒ IV meets the challenge of insomnia

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One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

- **Patients fall asleep rapidly, sleep longer on a single *h.s.* dose.**
- **Nighttime awakenings and time spent awake are reduced**
- **Effectiveness maintained without dosage increase from night to night**
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TOTAL SLEEP TIME (OVERALL MEAN)[3]
(5 patients with insomnia)



DALMANE (flurazepam HCl)
NIGHTS 1-3, 12-14, 26-28

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Kales A, *et al*: *Arch Gen Psychiatry* 23:226-232, Sep 1970
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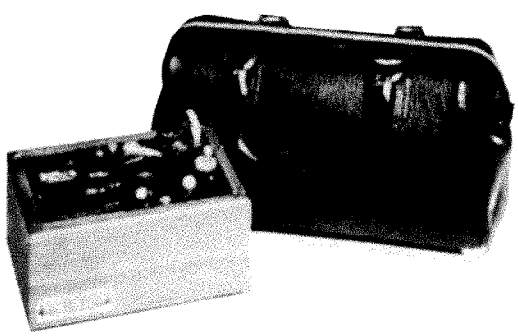
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In this issue

A Bicentennial Address:
Benjamin Rush and Those
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By Francis J. Braceland



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Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose or greatly depressed states due to C.N.S. depressants; blood dyscrasias; bone marrow depression; liver damage.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy.

Use in pregnancy only when necessary for patient's welfare.

Precautions: Use cautiously in angina. Avoid high doses and parenteral administration when cardiovascular system is impaired. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Additive effect is possible with other C.N.S. depressants. Prolonged administration of high doses may result in cumulative effects with severe C.N.S. or vasomotor symptoms. If retinal changes occur, discontinue drug. Agranulocytosis, thrombocytopenia, pancytopenia, anemia, cholestatic jaundice, liver damage have been reported.

Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudo-parkinsonism, persistent tardive dyskinesia.

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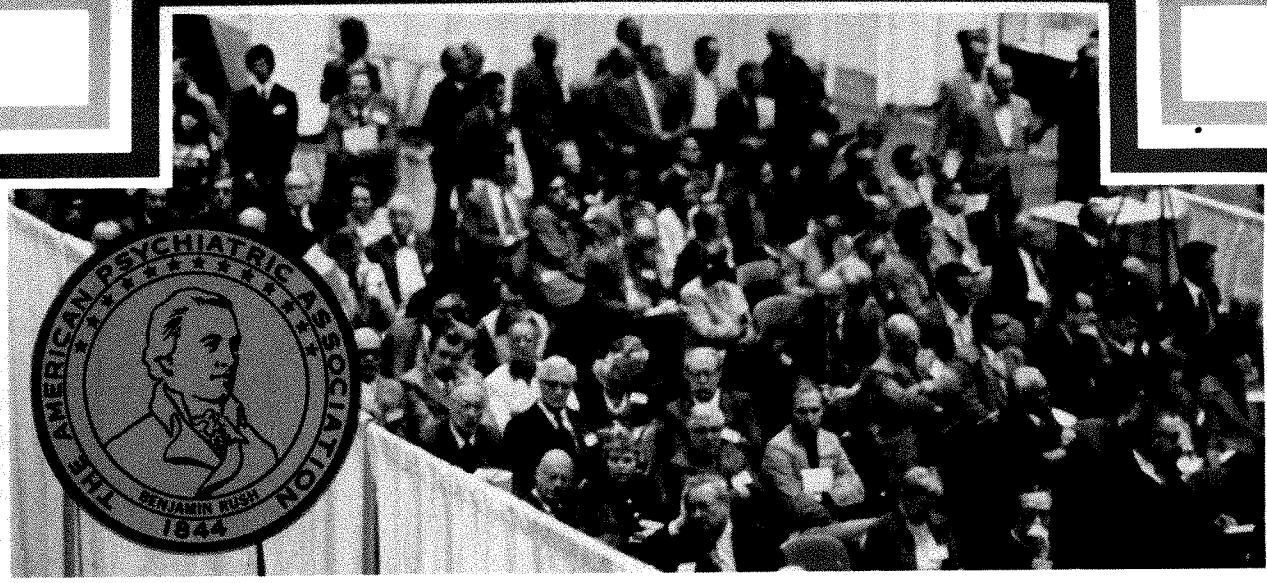
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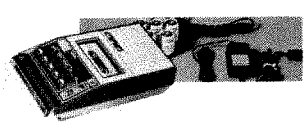
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2. Schildkraut JJ: Tranylcypromine: effects on norepinephrine metabolism in rat brain. Am J Psychiatry 126:925–931, 1970
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Tables and figures. Tables and figures should be self-explanatory and should supplement, not duplicate, the text. See recent issues of the *Journal* for the general requirements of style.

Each table should be typed on a separate sheet, attached at the end of the manuscript. The data should be arranged so that columns of like material read down, not across.

A complete set of figures, preferably in the form of glossy prints, should accompany each of the two copies of the paper. Most figures will be reduced to about 3¼ inches in width; all elements of a figure should be prepared to withstand this reduction. Graphs should be finished drawings not requiring further artwork. Authors are urged to engage the services of a professional in the preparation of figures. Authors may be required to meet the costs of any further artwork that must be done in the editorial office.

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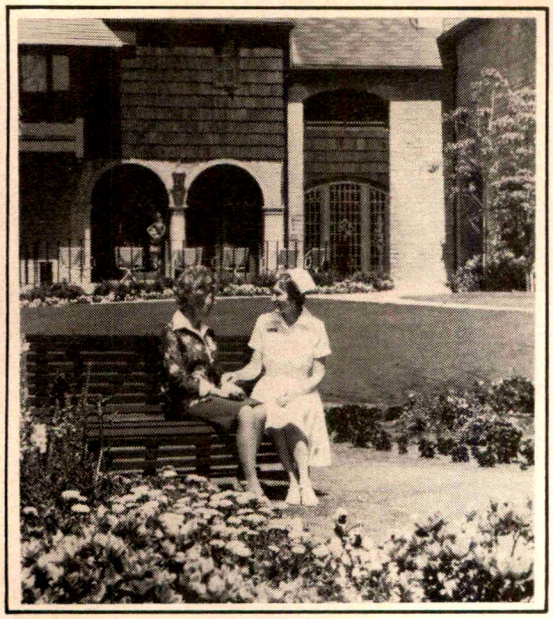
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Loxapine succinate [Daxolin] has been studied clinically in both chronic and acute schizophrenic patients.[1]

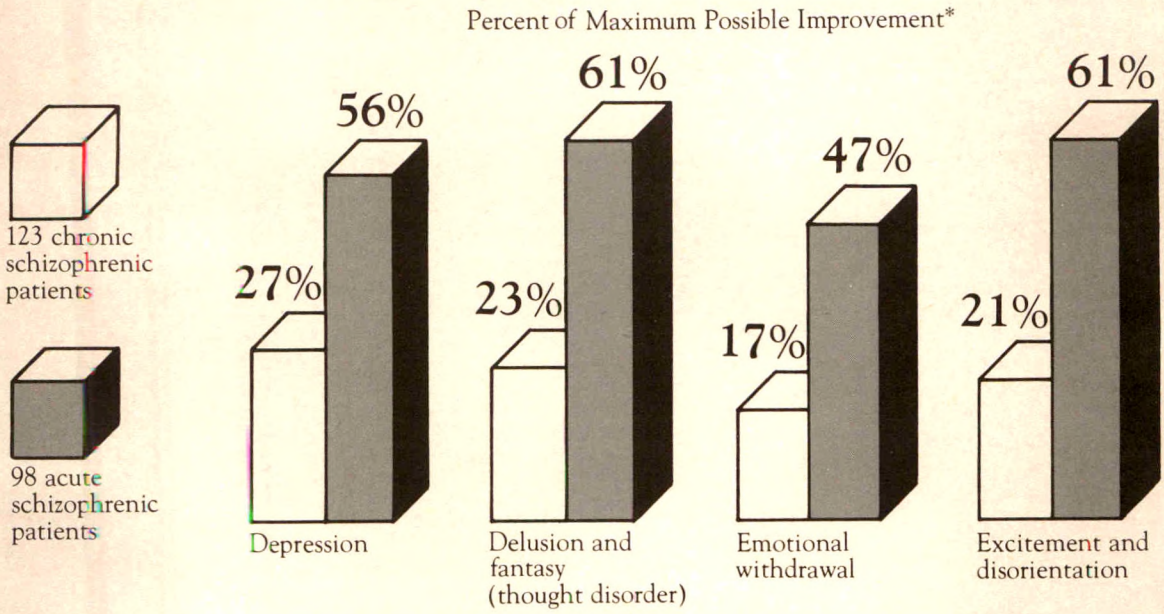
evaluated by psychiatrists—BPRS (Brief Psychiatric Rating Scale), CGI (Clinical Global Impression)

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compared with various other agents including chlorpromazine, trifluoperazine, thiothixene, as well as placebo—from 11 published, controlled/double-blind studies involving 441 patients[1]

helps control symptoms of acute and chronic schizophrenia

Evaluation (by BPRS) of symptomatic response in 221 chronic and acute schizophrenic patients[1]



- ☐ significant improvement noted in behavior patterns, severity of symptoms significantly reduced
- ☐ helps control symptoms in responsive patients
- ☐ dosage strengths to meet individual needs
- ☐ manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently.†

†See "Adverse Reactions" and "Actions" sections in the prescribing information on last page.

and...

second...
help for those close to the schizophrenic

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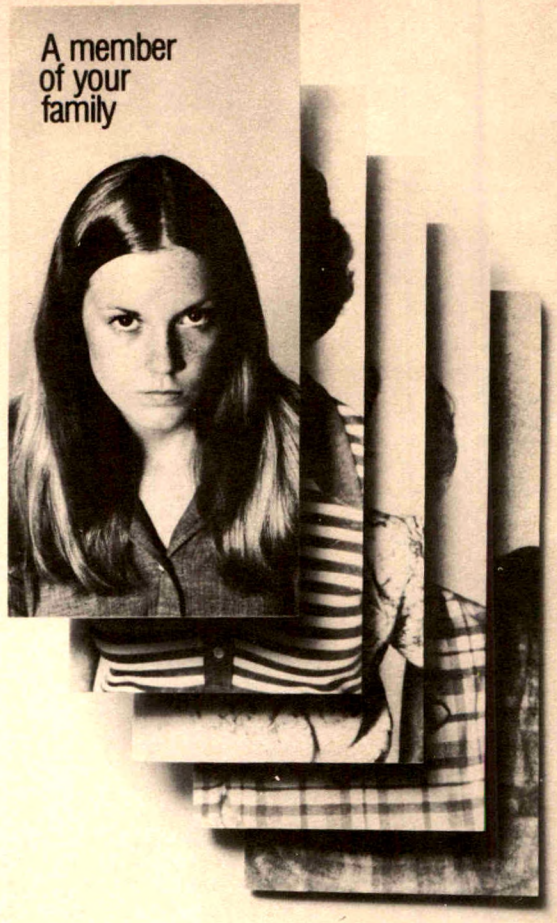
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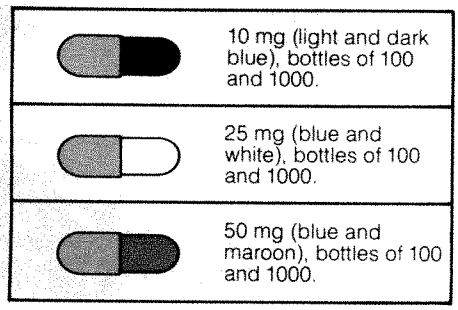
Daxolin®
(loxapine succinate)

a promising neuroleptic agent for symptomatic control of schizophrenia

See next page for prescribing information.

Daxolin® (loxapine succinate)

individualized dosage strengths to meet the varying needs of the schizophrenic



10 mg (light and dark blue), bottles of 100 and 1000.

25 mg (blue and white), bottles of 100 and 1000.

50 mg (blue and maroon), bottles of 100 and 1000.

Description: DAXOLIN (loxapine succinate), a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl) dibenz[b,f][1,4] oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg of loxapine succinate is equivalent to 1 mg of loxapine.

Actions: Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar onset and duration of primary pharmacologic effect was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates but are unconjugated in the feces.

Indications: DAXOLIN is indicated for the manifestations of schizophrenia.

Contraindications: DAXOLIN (loxapine succinate) is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.).

DAXOLIN is contraindicated in individuals with known hypersensitivity to the drug.

Warnings: *Usage in Pregnancy:* Safe use of DAXOLIN during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratogenicity was observed in studies in rats, rabbits or dogs. With the exception of one rabbit study, the highest dosage was two times the maximum recommended human dose and in some studies the dose was lower. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children: Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

DAXOLIN, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

Precautions: DAXOLIN should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving DAXOLIN at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect also may occur in man, loxapine may mask signs of overdosage of toxic drugs and obscure conditions such as intestinal obstruction and brain tumor.

DAXOLIN should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; and transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinsonian medication.

Adverse Reactions: *CNS Effects:* Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased. It usually subsides with continued DAXOLIN (loxapine succinate) therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching,weakness,and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of DAXOLIN have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved parkinsonism-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of DAXOLIN dosage or by administration of antiparkinsonian drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreoathetoid movements. These reactions sometimes require reduction or temporary withdrawal of DAXOLIN dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—In keeping with the action of all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients—especially females—on high-dose therapy. The symptoms are persistent and, in some patients, appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of the extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonian agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome; if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, light-headedness, and syncope have been reported. A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin Effects: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinsonian agents.

Other Adverse Reactions. Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

Dosage and Administration: DAXOLIN (loxapine succinate) is administered orally, usually in divided doses, two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended although, in severely disturbed patients, initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

How Supplied: DAXOLIN™ (loxapine succinate) is supplied in the following base-equivalent strengths:
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10 mg—Light and Dark Blue; bottles of 100 and 1000.
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for management of disturbed behavior in schizophrenic and manic states

- low dose, high potency phenothiazine useful for inpatient and outpatient treatment
- helps orient psychiatric patients to their surroundings
- effective with minimal sedation, usually produces little lethargy or drowsiness

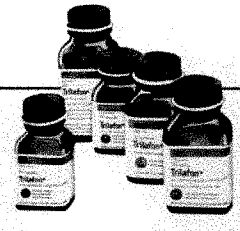
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Injection	5 mg/ml, 1 ml ampul
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Tablets	2,4,8,16 mg
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Please see next page for prescribing information.



Trilafon®
brand of perphenazine, NF

For management of schizophrenic and manic disorders in psychiatric hospitals, mental health clinics, and with outpatient treatment



TABLETS
for maintenance or control of patients in hospital or home

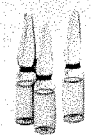
BENEFITS

- generally improve cooperation and communication
- decrease need for custodial care, hasten discharge



CONCENTRATE
for maintenance or control of uncooperative in-hospital patients

- easily mixes with most liquids
- ensures easy, steady, certain administration



INJECTION
for emergency control of uncooperative in-hospital patients

- usually takes effect in 10 minutes
- average duration of effect is 6 hours

TRILAFON® Tablets
brand of perphenazine, NF
REPETABS® Tablets
Concentrate
Injection

CONTRAINDICATIONS TRILAFON is contraindicated in drug-associated central nervous system depression (barbiturates, alcohol, narcotics, analgesics, antihistamines). Perphenazine is contraindicated in the presence of existing blood dyscrasias, bone marrow depression and pre-existing liver damage, and in patients who are hypersensitive to perphenazine.

TRILAFON **Injection** should not be given to patients in coma or severely depressed states.

WARNINGS **Dosage in pregnancy:** Perphenazine should only be given to pregnant patients when, in the judgment of the physician, the potential benefits outweigh the possible risks.

Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenazine should be under medical supervision, particularly if they are receiving high doses. Patients who have had any severe reaction to phenothiazines or to imipramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patients treated with perphenazine, the possibility that they might occur with TRILAFON should be considered: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the visual fields; pigmentation of the retina, cornea, or lens; cerebral edema; polyphagia; photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but not epinephrine, because epinephrine's action is blocked and partly reversed by perphenazine. Severe, acute hypotension has occurred with the use of phenothiazines and is of particular concern in patients with mitral insufficiency or pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic reaction to perphenazine; treatment with perphenazine should be stopped if this occurs.

The antiemetic effect of perphenazine can obscure signs of toxicity due to overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor or intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefore, contact of hands or clothing by those handling perphenazine solutions should be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-system-depressant actions of opiates, antihistamines, barbiturates, and alcohol, less than the usual dosage of these agents is required when they are administered concomitantly with TRILAFON. Patients should be cautioned that their response to alcohol may be increased while they are being treated with TRILAFON.

Phenothiazines also potentiate the effects of atropine, heat, and phosphorus insecticides, and should be used with caution in persons exposed to these agents.

ADVERSE REACTIONS *Extrapyramidal reactions:* dystonia including protrusion, discoloration, aching and rounding of the tongue; tonic spasm of the masticatory muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric crisis, trismus, torticollis, retrocollis, muscle weakness, and aching and numbness of the limbs; akathisia; motor restlessness; dyskinesia, parkinsonism; hyperreflexia; and ataxia. The incidence and severity of these reactions usually increase with increased dosage, but have occurred in some patients receiving low dosage. Reduction in dosage or treatment with an antispasmodic agent will usually control extrapyramidal reactions. In some instances, however, these reactions may persist after discontinuation of treatment with perphenazine.

Persistent tardive dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities. There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine, vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

Side effects with intramuscular TRILAFON **Injection** have been infrequent and transient. Dizziness or significant hypotension after treatment with TRILAFON (perphenazine) **Injection** is a rare occurrence.

NOVEMBER 1972
Schering Corporation
Kenilworth, N.J. 07033

Schering

SWW-5320

SINEQUAN®
DOXEPIN HCl

100-mg., 50-mg., 25-mg. Capsules and ORAL CONCENTRATE 10 mg./ml., 120-ml. (4-oz.) bottles

MAY BE AN APPROPRIATE CHOICE FOR YOUR NEXT PATIENT WITH CLINICAL DEPRESSION

See Brief Summary on last page of advertisement for information on adverse reactions, contraindications, warnings and precautions.

SINEQUAN®
DOXEPIN HCl

100-mg., 50-mg., 25-mg. Capsules and
ORAL CONCENTRATE 10 mg./ml., 120-ml. (4-oz.) bottles

Proved efficacy in the treatment of clinical depression

In the six years since its introduction, Sinequan (doxepin HCl) has objectively demonstrated its value in the treatment of clinical depression. Clinical studies have shown Sinequan to be unsurpassed in effectiveness when compared to other tricyclic antidepressants.

In addition, Sinequan may offer certain advantages not generally seen with some other drugs of its class:

Prompt sedative activity

Of the tricyclic antidepressants, Sinequan has been found to have one of the most prominent sedative effects.[1] This sedative property can be taken advantage of by administering the major portion of the daily dose *h.s.* Since clinically depressed patients frequently have accompanying sleep disturbances, this may be a valuable benefit.

Generally does not affect the activity of guanethidine at usual clinical doses[2]

"A new tricyclic antidepressant, doxepin, was evaluated for its ability to block the amine uptake mechanisms of the peripheral adrenergic neuron and blood platelet in man. At low doses, there was no evidence of inhibition of the amine pump." At clinical dosages up to 150 mg. per day, Sinequan can be given to man concomitantly with guanethidine and related compounds without blocking the antihypertensive effect.[2]

Cardiovascular effects, including hypotension and tachycardia, have been reported occasionally

In a series of double-blind comparative studies, 1,706 doxepin-treated patients were evaluated for side effects. Incidence of tachycardia was associated with only 45 (2.6%) clinically depressed/anxious patients. Incidence of symptomatic hypotension was associated with only 48 (2.8%) clinically depressed/anxious patients.[3]

REFERENCES:
1. Claghorn, J.L., in Claghorn, J.L. et al.: Patient Care 5:108, Oct. 15, 1971
2. Fann, W. E. et al.: Psychopharmacologia 22:111, 1971.
3. Pitts, N. E.: Psychosomatics 10:164, May-June 1969.

See Brief Summary on last page of advertisement for information on adverse reactions, contraindications, warnings and precautions.

DIAGNOSTIC EVALUATION FORM

NAME_____ DATE_____

Date and Place of Birth_____ Age_____ Marital Status_____

Home Address_____ Telephone_____

Business Address_____ Telephone_____

Spouse or Nearest Relative_____ Relationship_____

Address_____ Telephone_____

Referred by_____

CHIEF COMPLAINT:

PRESENT ILLNESS:

PAST HISTORY:

FAMILY HISTORY:



MAY BE AN APPROPRIATE CHOICE FOR YOUR NEXT CLINICALLY DEPRESSED PATIENT

SINEQUAN®
DOXEPIN HCl

100-mg., 50-mg., 25-mg. Capsules and
ORAL CONCENTRATE 10 mg./ml., 120-ml. (4-oz.) bottles

BRIEF SUMMARY
SINEQUAN® (doxepin HCl) Capsules/Oral Concentrate
Contraindications. Contraindicated in individuals who have shown hypersensitivity to the drug, and in patients with glaucoma or a tendency to urinary retention. Possibility of cross sensitivity with other dibenzoxepines should be kept in mind.
Warnings. The once-a-day dosage regimen of SINEQUAN in patients with intercurrent illness or patients taking other medications should be carefully adjusted. This is especially important in patients receiving other medications with anticholinergic effects.
Usage in Geriatrics: The use of SINEQUAN on a once-a-day dosage regimen in geriatric patients should be adjusted carefully based on the patient's condition.
Usage in Pregnancy: Reproduction studies performed in animals have shown no evidence of harm to the animal fetus. Since there is no experience in pregnant women receiving this drug, safety in pregnancy has not been established. There are no data with respect to the secretion of the drug in human milk and its effect on the nursing infant.
Usage in Children: Usage in children under 12 years of age is not recommended because safe conditions for its use have not been established.
MAO Inhibitors: Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefore, MAO inhibitors should be discontinued at least two weeks prior to the cautious initiation of therapy with this drug. The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time it has been administered and the dosage involved.
Precautions. Since drowsiness may occur with the use of this drug, patients should be warned of that possibility and cautioned against driving a car or operating dangerous machinery while taking this drug. Patients should also be cautioned that their response to alcohol may be potentiated.
Since suicide is an inherent risk in any depressed patient, and may remain so until significant improvement has occurred, patients should be closely supervised during the early course of therapy.
Should increased symptoms of psychosis or shift to manic symptomatology occur, it may be necessary to reduce dosage or add a major tranquilizer to the dosage regimen.
Adverse Reactions. NOTE: Some of the adverse reactions noted below have not been specifically reported with SINEQUAN use. However, due to the close pharmacological similarities among the tricyclics, the reactions should be considered when prescribing SINEQUAN.
Anticholinergic Effects: Dry mouth, blurred vision, constipation, and urinary retention have been reported. If they do not subside with continued therapy, or become severe, it may be necessary to reduce the dosage.
Central Nervous System Effects: Drowsiness is the most commonly noticed side effect. This tends to disappear as therapy is continued. Other infrequently reported CNS side effects are confusion, disorientation, hallucinations, numbness, paresthesias, ataxia, extrapyramidal symptoms and seizures.
Cardiovascular: Cardiovascular effects including hypotension and tachycardia have been reported occasionally.
Allergic: Skin rash, edema, photosensitization, and pruritus have occasionally occurred.
Hematologic: Eosinophilia has been reported in a few patients. There have been occasional reports of bone marrow depression manifesting as agranulocytosis, leukopenia, thrombocytopenia, and purpura.
Gastrointestinal: Nausea, vomiting, indigestion, taste disturbances, diarrhea, anorexia, and aphthous stomatitis have been reported. (See anticholinergic effects.)
Endocrine: Raised or lowered libido, testicular swelling, gynecomastia in males, enlargement of breasts and galactorrhea in the female, raising or lowering of blood sugar levels have been reported with tricyclic administration.
Other: Dizziness, tinnitus, weight gain, sweating, chills, fatigue, weakness, flushing, jaundice, alopecia, and headache have been occasionally observed as adverse effects.
Dosage and Administration. For most patients with illness of mild to moderate severity, a starting dose of 25 mg t.i.d. is recommended. Dosage may subsequently be increased or decreased at appropriate intervals and according to individual response. The usual optimum dose range is 75 mg/day to 150 mg/day.
In more severely ill patients an initial dose of 50 mg t.i.d. may be required with subsequent gradual increase to 300 mg/day if necessary. Additional therapeutic effect is rarely to be obtained by exceeding a dose of 300 mg/day.
In patients with very mild symptomatology or emotional symptoms accompanying organic disease, lower doses may suffice. Some of these patients have been controlled on doses as low as 25-50 mg/day.
As an alternative regimen, the total daily dosage, up to 150 mg, may be given on a once-a-day schedule without loss of effectiveness. This dose may be given at bedtime.
Anti-anxiety effect is apparent before the antidepressant effect. Optimal antidepressant effect may not be evident for two to three weeks.
Overdosage. A. Signs and Symptoms
1. Mild: Drowsiness, stupor, blurred vision, excessive dryness of mouth.
2. Severe: Respiratory depression, hypotension, coma, convulsions, cardiac arrhythmias and tachycardias.
Also: urinary retention (bladder atony), decreased gastrointestinal motility (paralytic ileus), hyperthermia (or hypothermia), hypertension, dilated pupils, hyperactive reflexes.
B. Management and Treatment
1. Mild: Observation and supportive therapy is all that is usually necessary.
2. Severe: Medical management of severe SINEQUAN overdosage consists of aggressive supportive therapy. If the patient is conscious, gastric lavage, with appropriate precautions to prevent pulmonary aspiration, should be performed even though SINEQUAN is rapidly absorbed. The use of activated charcoal has been recommended, as has been continuous gastric lavage with saline for 24 hours or more. An adequate airway should be established in comatose patients and assisted ventilation used if necessary. EKG monitoring may be required for several days, since relapse after apparent recovery has been reported. Arrhythmias should be treated with the appropriate antiarrhythmic agent. It has been reported that many of the cardiovascular and CNS symptoms of tricyclic antidepressant poisoning in adults may be reversed by the slow intravenous administration of 1 mg to 3 mg of physostigmine salicylate. Because physostigmine is rapidly metabolized, the dosage should be repeated as required. Convulsions may respond to standard anticonvulsant therapy; however, barbiturates may potentiate any respiratory depression. Dialysis and forced diuresis generally are not of value in the management of overdosage due to high tissue and protein binding of SINEQUAN.
Supply. Available as capsules containing doxepin HCl equivalent to 10 mg, 25 mg, 50 mg, and 100 mg doxepin in bottles of 100, 1000, and unit-dose packages of 100 (10 x 10's). SINEQUAN (doxepin HCl) 25 mg and 50 mg are also available in bottles of 5000. SINEQUAN Oral Concentrate is available in 120 ml bottles with an accompanying dropper calibrated at 5 mg, 10 mg, 15 mg, 20 mg, and 25 mg. Each ml contains doxepin HCl equivalent to 10 mg doxepin. Just prior to administration, SINEQUAN Oral Concentrate should be diluted with approximately 120 ml of water, whole or skimmed milk, or orange, grapefruit, tomato, prune or pineapple juice. SINEQUAN Oral Concentrate is not physically compatible with a number of carbonated beverages. For those patients requiring antidepressant therapy who are on methadone maintenance, SINEQUAN Oral Concentrate and methadone syrup can be mixed together with Gatorade®, lemonade, orange juice, sugar water, Tang®, or water; but not with grape juice. Preparation and storage of bulk dilutions is not recommended.
More detailed professional information available on request.

Pfizer LABORATORIES DIVISION
PFIZER INC.

In schizophrenia...

Because efficacy and side effects are a single consideration



Loxitane®
LOXAPINE SUCCINATE
Lederle

The record speaks louder than words

See LOXITANE prescribing information on last page of this advertisement for contraindications, warnings and precautions and for more detailed information concerning side effects.

From the record:

LOXITANE substan symptoms of schizo

DEPRESSION
Somatic Concern
Anxiety
Guilt Feelings
Depressive Mood



ACUTE SCHIZOPHRENIC PATIENTS
(Treated 3 to 6 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE

TRIFLUOPERAZINE

CHLORPROMAZINE

	Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
LOXITANE® LOXAPINE SUCCINATE	57	41	53	54	59
TRIFLUOPERAZINE	37	21			
CHLORPROMAZINE			42	52	36

CHRONIC SCHIZOPHRENIC PATIENTS
(Treated 8 to 12 weeks)

PERCENT OF MAXIMUM POSSIBLE IMPROVEMENT
IN ADJUSTED MEAN OF CLUSTER SCORES

LOXITANE® LOXAPINE SUCCINATE

TRIFLUOPERAZINE

CHLORPROMAZINE

	Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, MK (33 patients)	Schiele, BC (47 patients)
LOXITANE® LOXAPINE SUCCINATE	36	27	9	60	28	-6
TRIFLUOPERAZINE	44	25	-3	48		
CHLORPROMAZINE					-64	0

tially reduces the phrenia

Results of 11 controlled studies[1] evaluated by the Brief Psychiatric Rating Scale to determine the efficacy of LOXITANE® Loxapine Succinate by comparing it with trifluoperazine and chlorpromazine. They do not imply a claim of differential effectiveness or superiority. However, certain trends, not statistically significant, suggest superiority. These require further tests for confirmation.

1. Data on file, Clinical Research Department, Lederle Laboratories.

THOUGHT DISORDER

Conceptual Disorganization
Grandiosity
Suspiciousness
Hallucinatory Behavior
Unusual Thought Content



	Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
	68	52	54	79	52
	40	50			
			64	67	37

ANERGIA

Emotional Withdrawal
Mannerisms and Posturing
Motor Retardation
Blunted Affect



	Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
	53	43	13	43	52
	33	33			
			43	26	32

EXCITEMENT – DISORIENTATION

Excitement
Disorientation



	Denber, HCB (35 patients)	Smith, JA (24 patients)	Gershon, S (30 patients)	Goldstein, BJ (51 patients)	Moore, DF (57 patients)
	71	61	101	92	46
	27	40			
			82	68	31

	Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
	20	49	6	58	19	14
	8	29	-3	36		
					9	25

	Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
	9	15	-1	60	19	23
	14	27	-12	42		
					16	21

	Arik, M (50 patients)	Gallant, DM (24 patients)	van der Velde, CD (47 patients)	Zarate, CA (44 patients)	Clark, ML (33 patients)	Schiele, BC (47 patients)
	17	26	22	–	49	3
	18	44	-24	–		
					42	2



Loxitane®
LOXAPINE SUCCINATE
Lederle

From the record:

LOXITANE has favorable trends



exhibited certain in side effects profile

While cardiac arrest, blood dyscrasias and renal toxicity have been reported with other antipsychotic agents, they have not been seen with LOXITANE. Hepatotoxicity manifested by jaundice or biliary stasis has not been observed. Transient liver enzyme changes, however, have been reported, but it has not been determined whether they are related to LOXITANE administration.

Although a few cases of changes in ECG have been reported, a causal relationship between this reaction and LOXITANE has not been established. Clinical experience with LOXITANE has not demonstrated ocular toxicity, however, the possibility of its occurrence cannot be ruled out at this time. Of the various endocrine abnormalities, only galactorrhea has been noted with LOXITANE, and only in rare instances.

Manifestations of adverse effects on the central nervous system other than extrapyramidal symptoms have been encountered infrequently, and drowsiness, when it occurs, is usually mild and subsides with continued therapy. Skin rashes of uncertain etiology have been observed in a few patients during the hot summer months; therefore the possibility of phototoxicity and/or photosensitivity cannot be excluded. Like certain other antipsychotic agents, LOXITANE lowers the convulsive threshold and should be used with extreme caution in patients with a history of convulsive disorders.

In general, LOXITANE presents a profile of extrapyramidal side effects similar to that of other agents used in the treatment of schizophrenia.

Cardiovascular effects such as hypotension, hypertension, light-headedness and syncope have been reported. Anticholinergic effects seen with LOXITANE include dry mouth, nasal congestion, constipation and blurred vision.

See LOXITANE prescribing information on next page for contraindications, warnings and precautions and for more detailed information concerning side effects.

A range of dosage strengths to suit the patient's individual needs

Supplied

Capsules

10 mg Green and Yellow	
25 mg Green Two Tone	
50 mg Green and Blue	

Recommended Daily Dosage

Initial Dosage	MILD 10 mg b.i.d.	MODERATE 10 mg t.i.d. or q.i.d.	SEVERE 25 mg b.i.d.
First 7 to 10 Days	Increase dosage until psychotic symptoms are controlled. Dosage should not exceed 250 mg/day.		
	Usual dosage during titration: 50 to 150 mg/day.		
Maintenance Dosage	Adjust to lowest effective level.		
	Usual maintenance dosage: 60 to 100 mg/day.		
	Many patients are controlled with dosages as low as 20 to 60 mg/day.		



Loxitane®
LOXAPINE Lederle
SUCCINATE

Because efficacy and side effects are a single consideration

Loxitane®
LOXAPINE Lederle SUCCINATE

Because efficacy and side effects are a single consideration

FOR ORAL USE

DESCRIPTION

LOXITANE *loxapine*, a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f] [1,4]oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg. of loxapine succinate is equivalent to 1 mg. of loxapine.

ACTIONS

Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar timing of primary pharmacologic effects was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and is excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates and in the feces unconjugated.

INDICATIONS

LOXITANE *loxapine succinate* is indicated for the manifestations of schizophrenia.

LOXITANE has not been evaluated for the management of behavioral complications in patients with mental retardation, and therefore it cannot be recommended.

CONTRAINDICATIONS

LOXITANE is contraindicated in comatose or severe drug-induced depressed states (alcohol, barbiturates, narcotics, etc.)

LOXITANE is contraindicated in individuals with known hypersensitivity to the drug.

WARNINGS

Usage in Pregnancy—Safe use of LOXITANE *loxapine succinate* during pregnancy or lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the benefits of treatment be weighed against the possible risks to mother and child. No embryotoxicity or teratology was observed in studies in rats, rabbits or dogs, although with the exception of one rabbit study, the highest dosage was only two times the maximum recommended human dose and in some studies they were below this dose. Perinatal studies have shown renal papillary abnormalities in offspring of rats treated from mid-pregnancy with doses of 0.6 and 1.8 mg/kg, doses which approximate the usual human dose but which are considerably below the maximum recommended human dose.

Usage in Children—Studies have not been performed in children; therefore this drug is not recommended for use in children below the age of 16.

LOXITANE, like other tranquilizers, may impair mental and/or physical abilities, especially during the first few days of therapy. Therefore, ambulatory patients should be warned about activities requiring alertness (eg, operating vehicles or machinery), and about concomitant use of alcohol and other CNS depressants.

PRECAUTIONS

LOXITANE should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving LOXITANE at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect may also occur in man, loxapine may mask signs of overdosage of toxic drugs and may obscure conditions such as intestinal obstruction and brain tumor.

LOXITANE should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinson medication.

ADVERSE REACTIONS

CNS Effects—Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased.

It usually subsides with continued LOXITANE therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of LOXITANE *loxapine succinate* have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved Parkinson-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of LOXITANE dosage or by administration of antiparkinson drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreo-athetoid movements. These reactions sometimes require reduction or temporary withdrawal of LOXITANE dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinson agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects—Tachycardia, hypotension, hypertension, lightheadedness, and syncope have been reported.

A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin—Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or phototoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Anticholinergic Effects—Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinson agents.

Other Adverse Reactions—Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients. Rarely, galactorrhea and menstrual irregularity of uncertain etiology have been reported.

DOSAGE AND ADMINISTRATION

LOXITANE *loxapine succinate* is administered orally usually in divided doses two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended, although in severely disturbed patients initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

HOW SUPPLIED

LOXITANE *loxapine succinate* is supplied in the following base equivalent strengths:

CAPSULES Hard Shell Printed "Lederle"

10 mg—Green and Yellow; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5360.

25 mg—Green Two Tone; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5361.

50 mg—Green and Blue; Bottles of 100, 1000, and unit dose 10 x 10's—Product Number 5362.

REV. 7/76

Because schizophrenia is symptoms

LEDERLE LABORATORIES
A Division of American Cyanamid Company
Pearl River, New York 10965

796-6

AV/MD™

CASSETTE LECTURES OF 129th ANNUAL MEETING AMERICAN PSYCHIATRIC ASSOCIATION

CHILD PSYCHIATRY
No. 1 INTERPRETING CHILDREN TO THEIR PARENTS
No. 2 AUTISM AND CHILDHOOD SCHIZOPHRENIA: GENETIC STUDIES
No. 3 REACHING CHILD ABUSERS VIA TARGET TODDLERS
FREEDOM OF INQUIRY: SUBJECTS RIGHTS
No. 4 PROBLEMS IN PSYCHOPHARMACOLOGY
TRAINING IN PSYCHIATRY WHERE ARE WE GOING
No. 5 THE PROCESS OF PEER REVIEW
DSM III
No. 6 DSM III DEFINITION OF MENTAL DISORDER: IMPLICATIONS
20 YEARS OF PROGRESS IN PSYCHOANALYSIS
No. 7 SEXUALITY 1956-1976
COMMUNITY CARE
No. 8 ALTERNATIVES TO THE HOSPITAL: BENEFITS AND COSTS
ADULT DEVELOPMENT MARITAL COPING
No. 9 THE AGE 30 CRISIS AND THE SEVEN-YEAR ITCH
ROLE OF THE PSYCHIATRIST AS A CONSULTANT
No. 11 THE ROLE OF PSYCHIATRISTS IN NON-MEDICAL SETTINGS
RESEARCH AND TREATMENT OF TARDIVE DYSKINESIA
No. 13 THE NEUROBIOLOGY OF TARDIVE DYSKINESIA
No. 14 TARDIVE DYSKINESIA: PROBLEMS AND TREATMENT
No. 15 DRUG EVALUATION IN TARDIVE DYSKINESIA: PAPAVERINE AND DEANOL
No. 16 PREVENTION OF TARDIVE DYSKINESIA
PEER REVIEW: TEACHING AND LEARNING HOW
No. 17 THE PSYCHIATRIC RESIDENT AND PEER REVIEW
No. 18 HELPING STAFF IN THE FIELD OF MENTAL HEALTH ALCOHOLISM AND DRUG ABUSE LEARN HOW TO PARTICIPATE IN EFFECTIVE PEER REVIEW
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GENERAL HOSPITAL
Just three weeks ago
Mommy entered the hospital
for acute schizophrenia*
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Haldol®
(haloperidol)
tablets/concentrate/injection

For prompt control with minimal risk of adverse reactions

Highly effective in a wide range of psychotic symptoms,[1-10]
such as hallucinations, delusions, suspiciousness, hostility, mania, psychomotor agitation, etc., in both acute and chronic disorders.

Usually leaves patients more responsive to rehabilitation...[1,2]
better able to care for themselves and take part in therapy sessions.

Helps avoid long-term hospitalization.[1,3-5]
It is often possible to release the patient for treatment as an outpatient after a short confinement. HALDOL haloperidol controls his psychotic symptoms, usually leaving him sufficiently alert to carry on normal functions.

Permits aggressive titration to effective dosage levels,[3,6]
up to 100 mg/day orally, to achieve optimal response when patient is inadequately controlled at lower dosage...to help you promptly control and stabilize new patients.

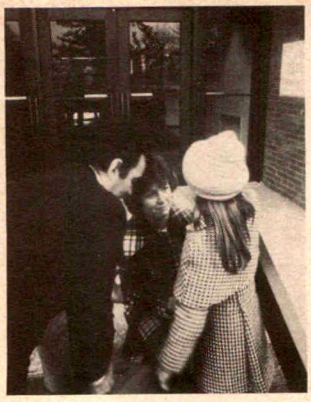
Common side effects easily controlled.[1,3,6-8]
Although extrapyramidal symptoms (EPS) have been reported frequently, they are usually dose-related and readily controlled with dose adjustment or antiparkinson drugs. EPS often diminish spontaneously with continued use of HALDOL haloperidol.

*Not an actual case history, this situation illustrates the action of HALDOL haloperidol as reported in various clinical studies (available on request).

Reduces risk of several treatment problems.[1,2,6,7,9]
Transient hypotension occurs rarely and severe orthostatic hypotension has not been reported. Marked sedation is rare, although some instances of drowsiness have been reported. In addition, with chronic use, it is unlikely to cause hepatic damage, serious hematologic reactions, photosensitivity reactions and skin rashes...and has minimal effect on renal function.

Please turn page for information relating to Indications, Contraindications, Warnings, Precautions and Adverse Reactions.

Important: Full directions for use should be read before HALDOL haloperidol is administered or prescribed.



Haldol® (haloperidol)

tablets/concentrate/injection

For prompt control of psychotic symptoms with minimal risk of adverse reactions

A Dosage Form for Every Need:

5 tablet strengths for convenience in individualizing dosage: ½ mg., 1 mg., 2 mg., 5 mg. and 10 mg.

A tasteless, odorless, colorless liquid concentrate for better patient acceptability: 2 mg. per ml.

A rapid-acting injection for psychiatric emergencies: 5 mg. per ml., with 1.8 mg. methylparaben and 0.2 mg. propylparaben per ml., and lactic acid for pH adjustment to 3.4±0.2.

Indications: HALDOL haloperidol is indicated for use in the management of manifestations of psychotic disorders.

It is also indicated for the control of tics and vocal utterances of Gilles de la Tourette's syndrome.

Contraindications: HALDOL haloperidol is contraindicated in patients who are severely depressed, comatose, have CNS depression due to alcohol or other centrally-acting depressants, have Parkinson's disease or are hypersensitive to this drug.

Warnings: ***Usage in Pregnancy:*** Safe use of HALDOL haloperidol in pregnancy and lactation has not been established; therefore, its use in pregnancy, in nursing mothers, or in women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards. A case of phocomelia in an infant whose mother received haloperidol along with a number of other medications during the first trimester of pregnancy has been reported (a causal relationship was not established in this case). Animals receiving 2 to 20 times the maximum human dose of haloperidol orally and/or parenterally showed increased incidence of resorption, reduced fertility, delayed delivery, dose-related pup mortality (presumably due to lack of maternal care reflecting CNS depression).

Usage in Children: Safety and effectiveness in children have not been established; therefore, this drug is not recommended for use in the pediatric age group.

General: Cases of bronchopneumonia, some fatal, have followed the use of major tranquilizers, including haloperidol. It has been postulated that lethargy and decreased sensation of thirst may lead to dehydration, hemoconcentration and reduced pulmonary ventilation. If these signs and symptoms appear, especially in the elderly, the physician should institute remedial therapy promptly. Although not reported with HALDOL haloperidol, decreased serum cholesterol and/or cutaneous and ocular changes have been reported in patients receiving chemically-related drugs. HALDOL haloperidol may impair the mental and/or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a motor vehicle. The ambulatory patient should be warned accordingly. The use of alcohol should be avoided due to possible additive effects and hypotension.

Precautions: HALDOL haloperidol should be administered cautiously to patients: (1)—with severe cardiovascular disorders, because of the possibility of transient hypotension and/or precipitation of anginal pain. Should hypotension occur and a vasopressor be required, epinephrine should not be used since HALDOL haloperidol may block its vasopressor activity and paradoxical further lowering of blood pressure may occur. (2)—receiving anticonvulsant medication, because HALDOL haloperidol may lower the convulsive threshold. Adequate anticonvulsant therapy should be maintained concomitantly. (3)—with known allergies, or with a history of allergic reactions to drugs. (4)—receiving anticoagulants, since an isolated instance of interference occurred with the effects of one anticoagulant (phenindione).

If concomitant antiparkinson medication is required, it may have to be continued after HALDOL haloperidol is discontinued because of the difference in excretion rates. If both are discontinued simultaneously, extrapyramidal symptoms may occur. Intraocular pressure may increase when anticholinergic drugs, including antiparkinson agents, are administered concomitantly with HALDOL haloperidol. When HALDOL haloperidol is used to control mania in cyclic disorders there may be a rapid mood swing to depression.

Adverse Reactions: ***CNS Effects:*** *Extrapyramidal Reactions*—Neuromuscular (extrapyramidal) reactions have been reported frequently, often during the first few days of treatment. Generally they involved Parkinson-like symptoms which usually were mild to moderately severe and reversible. Other types of neuromuscular reactions (motor restlessness, dystonia, akathisia, hyperreflexia, opisthotonos, oculogyric crises) have been reported far less frequently, but were often more severe. Severe extrapyramidal reactions have been reported at relatively low doses. Generally extrapyramidal symptoms are dose-related since they occur at relatively high doses and disappear or become less severe when the dose is reduced. Administration of antiparkinson drugs may be required for control of such reactions. Persistent extrapyramidal reactions have been reported and the drug may have to be discontinued in such cases. *Persistent Tardive Dyskinesia*—Tardive dyskinesia may appear during long-term therapy or after therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear irreversible. There is no known effective treatment. All antipsychotic agents should be discontinued. The syndrome may be masked by reinstitution of drug, increasing dosage, or switching to a different antipsychotic agent. *Other CNS Effects*—Insomnia, restlessness, anxiety, euphoria, agitation, drowsiness, depression, lethargy, headache, confusion, vertigo, grand mal seizures, and exacerbation of psychotic symptoms including hallucinations. ***Cardiovascular Effects:*** Tachycardia and hypotension. ***Hematologic Effects:*** Reports have appeared of mild and usually transient leukopenia and leukocytosis, minimal decreases in red blood cell counts, anemia, or a tendency toward lymphomonocytosis. Agranulocytosis has rarely been reported and then only in association with other medication. ***Liver Effects:*** Impaired liver function and/or jaundice have been reported, although a causal relationship has not been established. ***Dermatologic Reactions:*** Maculopapular and acneiform skin reactions and isolated cases of photosensitivity and loss of hair. ***Endocrine Disorders:*** Lactation, breast engorgement, mastalgia, menstrual irregularities, gynecomastia, impotence, increased libido, hyperglycemia and hypoglycemia. ***Gastrointestinal Effects:*** Anorexia, constipation, diarrhea, hypersalivation, dyspepsia, nausea and vomiting. ***Autonomic Reactions:*** Dry mouth, blurred vision, urinary retention and diaphoresis. ***Respiratory Effects:*** Laryngospasm, bronchospasm and increased depth of respiration.

Complete dosage information available in insert which accompanies each package (or on request).

The use of the injectable form is intended for the acutely agitated psychotic patient with moderately severe to very severe symptoms.

IMPORTANT: Full directions for use should be read before HALDOL haloperidol is administered or prescribed. 9/

References:

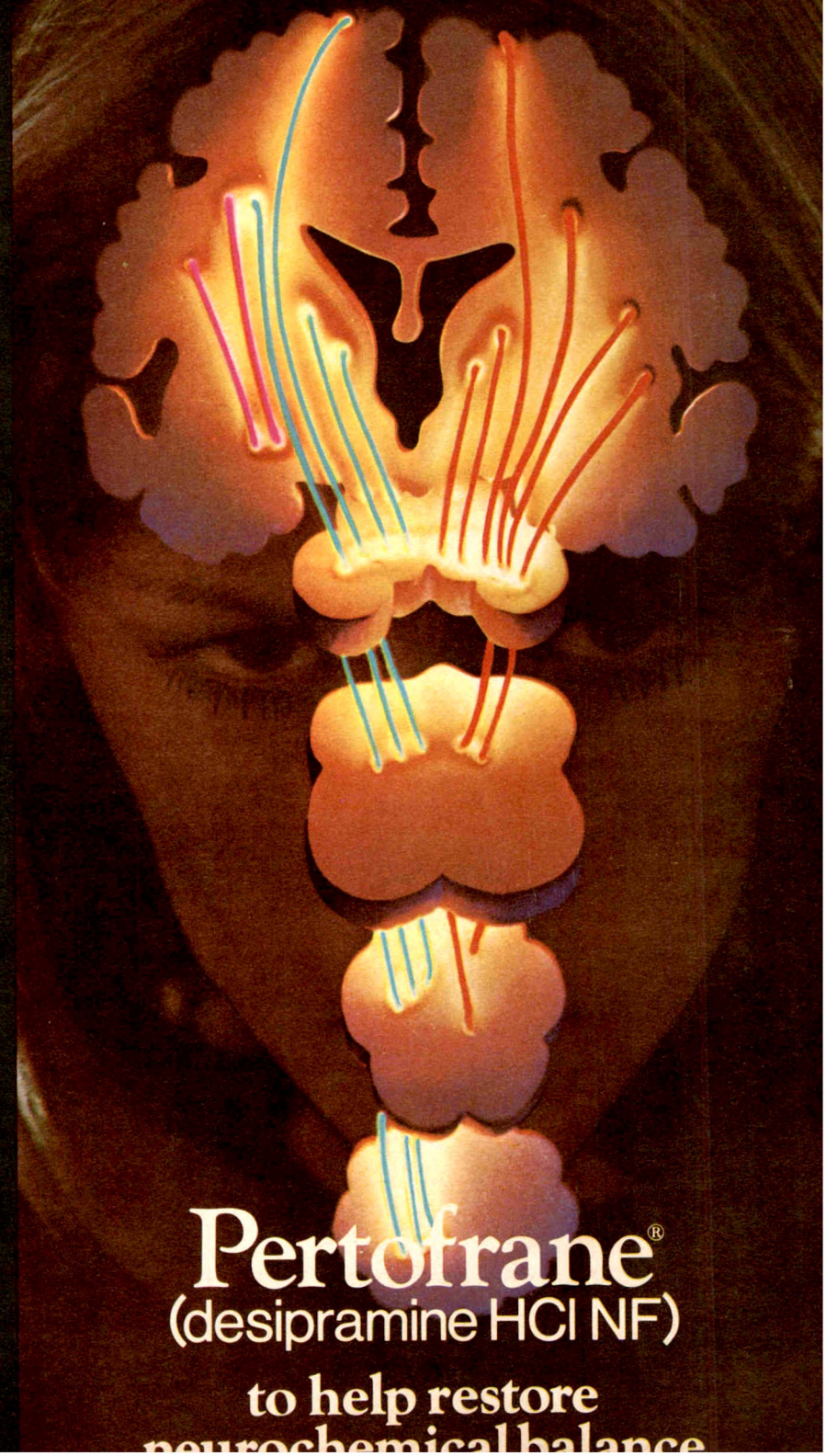
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McNEIL McNeil Laboratories, Inc., Fort Washington, Pa. 19034

Indication: For relief of mental depression. **Contraindications:** Do not use MAO inhibitors concomitantly or within 2 weeks of the use of this drug. Hyperpyretic crises or severe convulsive seizures may occur with such combinations; potentiation of adverse reactions can be serious or even fatal. When substituting Pertofrane (desipramine HCl) in patients receiving an MAO inhibitor, allow an interval of at least 14 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated following recent myocardial infarction and in patients with a known hypersensitivity to tricyclic antidepressants. **Warnings:** Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm. Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold). This drug may block the action of the antihypertensive, guanethidine, and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery. The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures. Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery. Do not use in women who are or may become pregnant, or in children under 12 years of age, unless the clinical situation warrants the potential risk. Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients. **Precautions:** Potentially suicidal patients require careful supervision and protective measures during therapy. Prescriptions should be limited to small quantities. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances. Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy. **Adverse Reactions:** The following have been reported: *Nervous System:* dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG patterns, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract:* anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin:* skin rashes (including photosensitization), perspiration and flushing sensations. *Liver:* rare cases of transient jaundice (apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements:* bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System:* orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System:* urinary frequency or retention and impotence. *Endocrine System:* occasional hormonal effects, including gynecomastia, galactorrhea and breast enlargement, and decreased libido and estrogenic effect. *Sensitivity:* urticaria and rare instances of drug fever and cross-sensitivity with imipramine. **Dosage:** All patients except geriatric and adolescent: 50 mg. t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg. daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg. daily. Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response. Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated. **How Supplied:** 25 mg. capsules (pink), bottles of 100 and 1000. Also, 50 mg. capsules (maroon and pink), bottles of 100 and 1000.

USV USV Pharmaceutical Mfg. Corp.

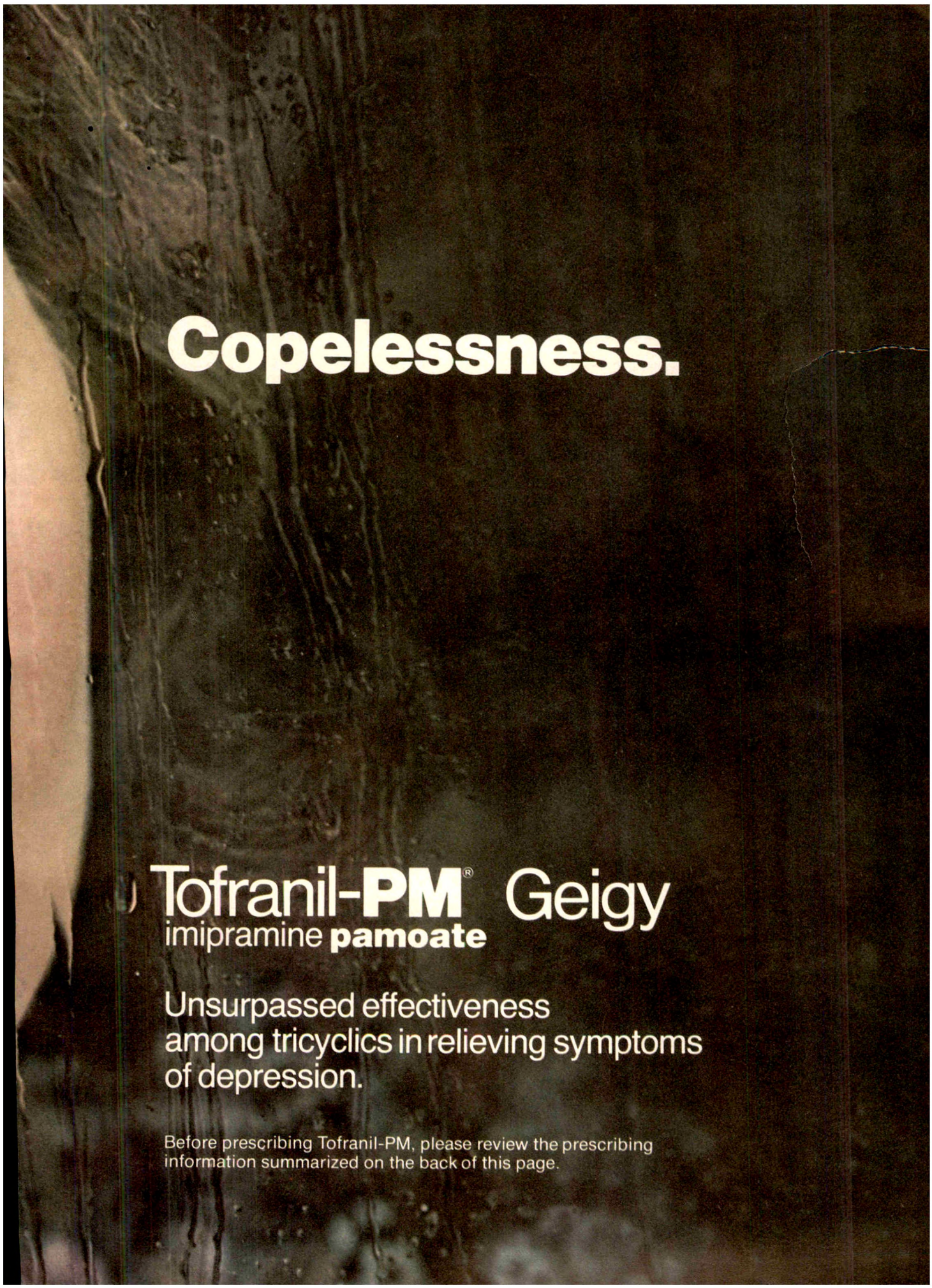
In depression... when biogenic amine deficits may exist



Pertofrane®

(desipramine HCl NF)

to help restore neurochemical balance


Copelessness.
Tofranil-PM® Geigy
imipramine pamoate
Unsurpassed effectiveness
among tricyclics in relieving symptoms
of depression.
Before prescribing Tofranil-PM, please review the prescribing
information summarized on the back of this page.

Geigy

Tofranil-PM®
imipramine **pamoate**

As symptoms are relieved, mood and motivation may be markedly improved.

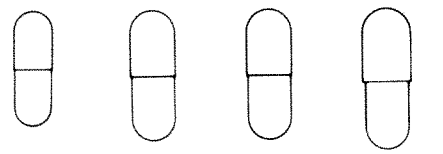
Patients are usually alert and capable of functioning at more normal levels of behavior.

Good results are usually seen at the starting dose of one 75-mg capsule h.s.

For many patients, dosage can be safely increased to 150 mg daily.

Because sedation may occur, caution patients against driving or operating dangerous machinery.

Before prescribing Tofranil-PM, please review the prescribing information summarized on this page.



75 mg 100 mg 125 mg 150 mg

Each capsule contains imipramine pamoate equivalent to 75, 100, 125 or 150 mg of imipramine hydrochloride.

Tofranil-PM®
brand of imipramine pamoate

Indications: For the relief of symptoms of depression. Endogenous depression is more likely to be alleviated than other depressive states.

Contraindications: The concomitant use of monoamine oxidase inhibiting compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur in patients receiving such combinations. The potentiation of adverse effects can be serious, or even fatal. When it is desired to substitute Tofranil-PM, brand of imipramine pamoate, in patients receiving a monoamine oxidase inhibitor, as long an interval should elapse as the clinical situation will allow, with a minimum of 14 days. Initial dosage should be low and increases should be gradual and cautiously prescribed. The drug is contraindicated during the acute recovery period after a myocardial infarction. Patients with a known hypersensitivity to this compound should not be given the drug. The possibility of cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

—patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
—patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
—hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
—patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
—patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Since imipramine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as operating an automobile or machinery, the patient should be cautioned accordingly.

Usage in Children: Tofranil-PM, brand of imipramine pamoate, should not be used in children of any age because of the increased potential for acute overdosage due to the high unit potency (75 mg., 100 mg., 125 mg. and 150 mg.). Each capsule contains imipramine pamoate equivalent to 75 mg., 100 mg., 125 mg. or 150 mg. imipramine hydrochloride.

Precautions: It should be kept in mind that the possibility of suicide in seriously depressed patients is inherent in the illness and may persist until significant remission occurs. Such patients should be carefully supervised during the early phase of treatment with Tofranil-PM, brand of imipramine pamoate, and may require hospitalization. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, Tofranil-PM, brand of imipramine pamoate, may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g., paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Avoid the use of preparations, such as decongestants and local anesthetics, which contain any sympathomimetic amine (e.g., adrenalin, noradrenalin), since it has been reported that tricyclic antidepressants can potentiate the effects of catecholamines.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential, since there is limited clinical experience.

Adverse Reactions: Note: Although the listing which follows includes a few adverse reactions which have not been reported with this specific drug, the pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when imipramine is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue); drug fever; cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea, peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

Dosage and Administration: In adult outpatients, therapy should be initiated on a once-a-day basis with 75 mg./day. This may be increased to 150 mg./day which is the dose level which usually obtains optimum response. If necessary, dosage may be increased to 200 mg./day. Dosage should be modified as necessary by clinical response and any evidence of intolerance. Daily dosage may be given at bedtime, or in some patients in divided daily doses.

Hospitalized patients should be started on a once-a-day basis with 100-150 mg./day and may be increased to 200 mg./day. Dosage should be increased to 250-300 mg./day if there is no response after two weeks.

Following remission, maintenance medication may be required for a longer period of time at the lowest dose that will maintain remission. The usual adult maintenance dosage is 75-150 mg./day on a once-a-day basis, preferably at bedtime.

In adolescent and geriatric patients, capsules of Tofranil-PM, brand of imipramine pamoate, may be used when total daily dosage is established at 75 mg. or higher. It is generally unnecessary to exceed 100 mg./day in these patients. This dosage may be given once a day at bedtime or, if needed, in divided daily doses.

How Supplied: Tofranil-PM, brand of imipramine pamoate: Capsules of 75, 100, 125 and 150 mg. (Each capsule contains imipramine pamoate equivalent to 75, 100, 125 or 150 mg. of imipramine hydrochloride.)
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Just Published . . .

The Rape Victim

by Elaine Hilberman, M.D.

Mythologies about rape are legion. However, in recent years behavioral scientists have accumulated a body of information about rape and about an unfolding series of reactions experienced by the victim after rape. The aim of this concise, tightly reasoned book is to summarize what is now known about the needs and experiences of the victim and her family, and to provide a framework in which the clinician can more knowledgeably supply assistance and support. This document, published by the American Psychiatric Association, is the result of a project of the Association's Committee on Women.

Pointing out that the profound impact of rape stress is best understood in the context of rape as "a crime against the person and not the hymen," Dr. Hilberman sees rape as the ultimate violation of the self short of homicide, as an act of violence and humiliation in which not only is the victim's very existence threatened, and her inner and most private space invaded, but her autonomy and control are totally demolished. Dr. Hilberman shows that if and when the victim reports the crime, she is confronted with a complex series of yet additional stresses growing out of her contact with the hospital, police, courts, media and community opinion. Additionally, her crisis differs from other crises in that her usual social support system is likely to be disrupted. Her immediate needs are for empathy and safety, and a sense of control over what is happening in her dealings with the several agencies. Dr. Hilberman shows that in the absence of sensitivity to these needs, the experience of reporting becomes another assault.

This book presents a professional, sobering, and balanced picture of the problems of the rape victim and details what the clinician must know—about local hospital policy, criminal justice procedure, rape statutes, and community attitudes and services—in order to be able to treat victims with an understanding of the larger context in which rape occurs.

ELAINE HILBERMAN, M.D., *is in the Department of Psychiatry at the University of North Carolina School of Medicine.*

Paperback edition—$5.00 each, may be ordered from the AMERICAN PSYCHIATRIC ASSOCIATION, Publication Sales, 1700 18th St., N.W., Washington, D.C. 20009.

Hardback edition—$7.95 may be ordered from Basic Books, Inc., 10 East 53rd Street, New York, New York 10022.

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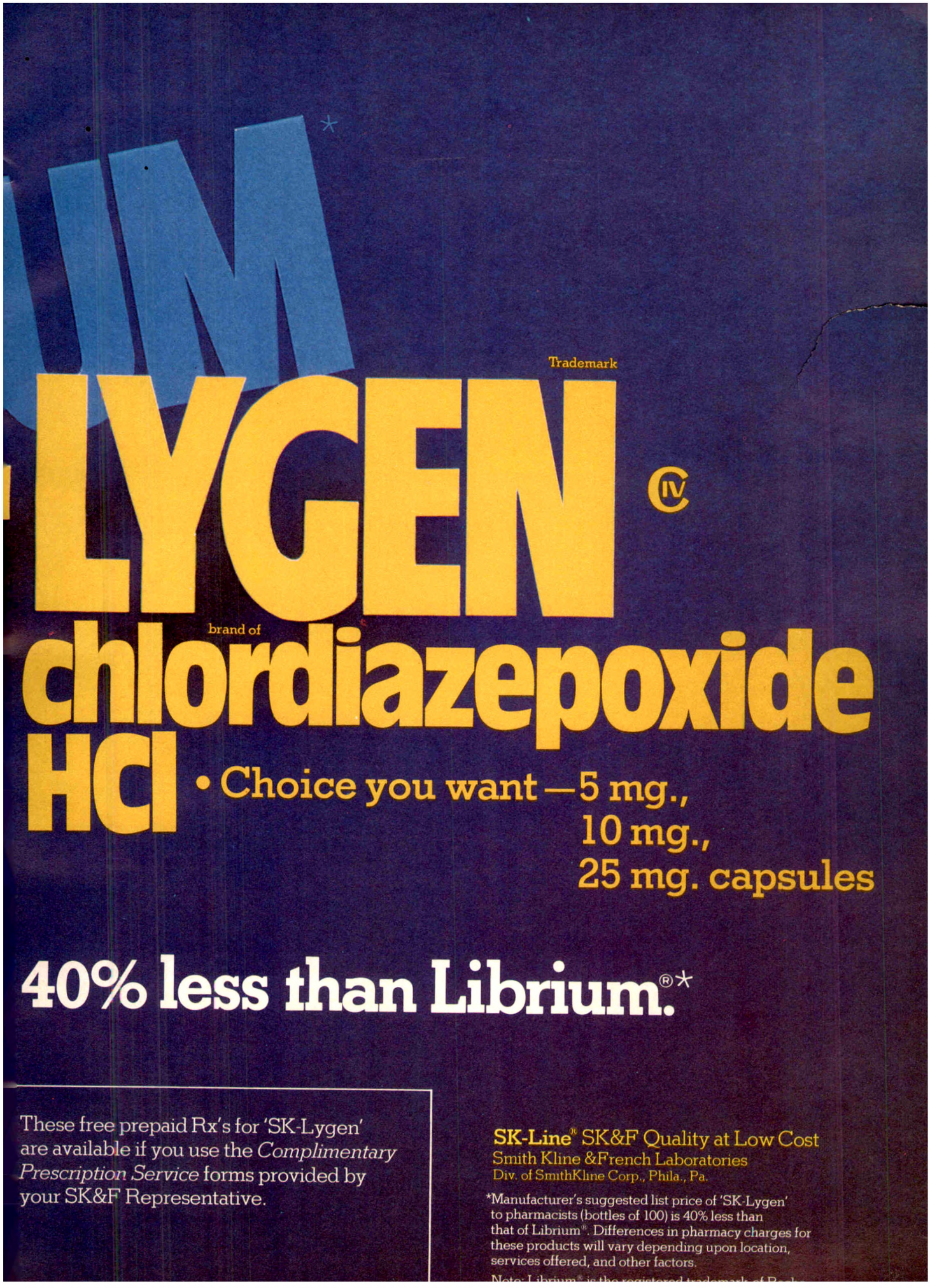
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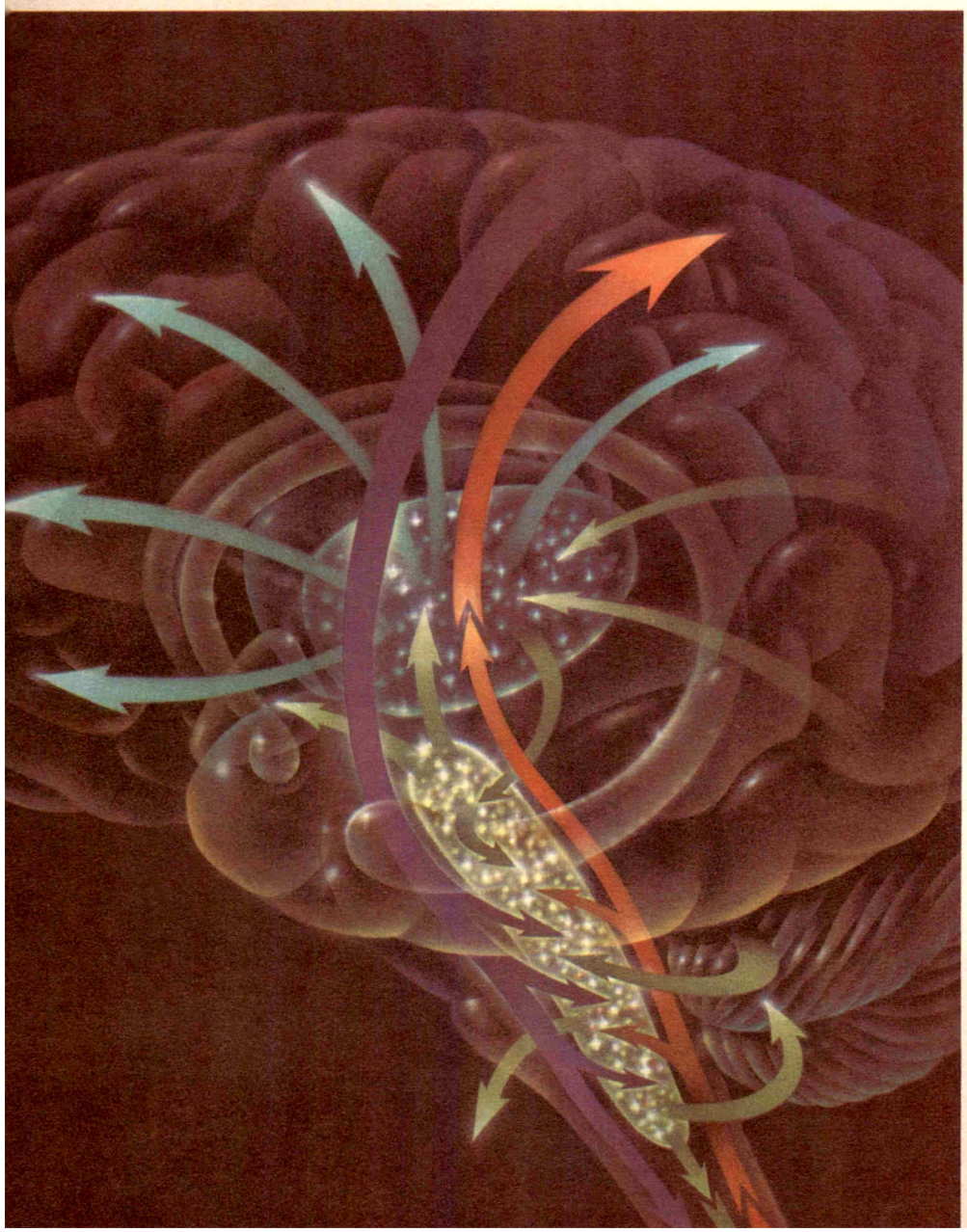
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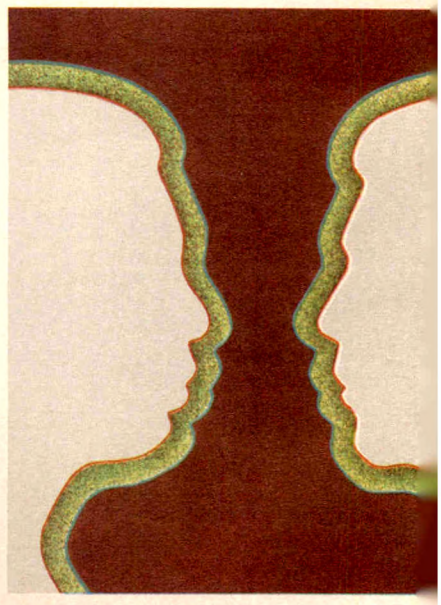
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Adjustment	Percent
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To function with privileges	89%
To hold hospital job	85%
To leave hospital	70%
To maintain home	33%
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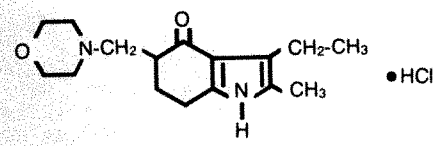
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DESCRIPTION MOBAN® (molindone hydrochloride) is a dihydroindolone compound which is not structurally related to the phenothiazines, the butyrophenones or the thioxanthenes.

MOBAN® is 3-ethyl-6, 7-dihydro-2-methyl-5-(morpholinomethyl) indol-4 (5H)-one hydrochloride. It is a white crystalline powder, freely soluble in water and alcohol and has a molecular weight of 312.67.



MOLINDONE HYDROCHLORIDE

ACTIONS MOBAN® (molindone hydrochloride) has a pharmacological profile in laboratory animals which predominantly resembles that of major tranquilizers causing reduction of spontaneous locomotion and aggressiveness, suppression of a conditional response and antagonism of the bizarre stereotyped behavior and hyperactivity induced by amphetamines. In addition, MOBAN® antagonizes the depression caused by the tranquilizing agent tetrabenazine.

In human clinical studies tranquilization is achieved in the absence of muscle relaxing or incoordinating effects. Based on EEG studies, MOBAN® exerts its effect on the ascending reticular activating system.

Human metabolic studies show MOBAN® (molindone hydrochloride) to be rapidly absorbed and metabolized when given orally. Unmetabolized drug reached a peak blood level at 1.5 hours. Pharmacological effect from a single oral dose persists for 24-36 hours. There are 36 recognized metabolites with less than 2-3% unmetabolized MOBAN® being excreted in urine and feces.

INDICATIONS MOBAN® (molindone hydrochloride) is indicated in the management of the manifestations of schizophrenia.

CONTRAINDICATIONS MOBAN® (molindone hydrochloride) is contraindicated in severe central nervous system depression (alcohol, barbiturates, narcotics, etc.) or comatose states, and in patients with known hypersensitivity to the drug.

WARNINGS Usage in Pregnancy: Studies in the pregnant patient have not been carried out. Reproduction studies have been performed in the following animals:

Pregnant Rats oral dose—	20 mg/kg/day—2 weeks
no adverse effect	
	40 mg/kg/day—2 weeks
no adverse effect	
Pregnant Mice oral dose—	20 mg/kg/day—9 days
slight increase resorptions	
	40 mg/kg/day—9 days
slight increase resorptions	
Pregnant Rabbits oral dose—	5 mg/kg/day—12 days
no adverse effect	
	10 mg/kg/day—12 days
no adverse effect	
	20 mg/kg/day—12 days
no adverse effect	

Animal reproductive studies have not demonstrated a teratogenic potential. The anticipated benefits must be weighed against the unknown risks to the fetus if used in pregnant patients.

Nursing Mothers: Data are not available on the content of MOBAN® (molindone hydrochloride) in the milk of nursing mothers.

Usage in Children: Use of MOBAN® (molindone hydrochloride) in children below the age of twelve years is not recommended because safe and effective conditions for its usage have not been established.

PRECAUTIONS Some patients receiving MOBAN® (molindone hydrochloride) may note drowsiness initially and they should be advised against activities requiring mental alertness until their response to the drug has been established.

Increased activity has been noted in patients receiving MOBAN®. Caution should be exercised where increased activity may be harmful.

MOBAN® does not lower the seizure threshold in experimental animals to the degree noted with more sedating antipsychotic drugs. However, convulsive seizures have been reported in a few instances.

The physician should be aware that this tablet preparation contains calcium sulfate as an excipient and that calcium ions may interfere with the absorption of preparations containing phenytoin sodium and tetracyclines.

MOBAN® has an antiemetic effect in animals. A similar effect may occur in humans and may obscure signs of intestinal obstruction or brain tumor.

ADVERSE REACTIONS CNS EFFECTS The most frequently occurring effect is initial drowsiness that generally subsides with continued usage of the drug or lowering of the dose.

Noted less frequently were depression, hyperactivity and euphoria.

Neurological

Extrapyramidal Reactions

Extrapyramidal reactions noted below may occur in susceptible individuals and are usually reversible with appropriate management.

Akathisia

Motor restlessness may occur early.

Parkinson Syndrome

Akinesia, characterized by rigidity, immobility and reduction of voluntary movements and tremor, have been observed. Occurrence is less frequent than akathisia.

Dystonic Syndrome

Prolonged abnormal contractions of muscle groups occur infrequently. These symptoms may be managed by the addition of a synthetic antiparkinson agent (other than L-dopa), small doses of sedative drugs, and/or reduction in dosage.

Autonomic Nervous System

Occasionally blurring of vision, tachycardia, nausea, dry mouth and salivation have been reported. Urinary retention and constipation may occur particularly if anticholinergic drugs are used to treat extrapyramidal symptoms.

Hematological

There have been rare reports of leucopenia and leucocytosis. If such reactions occur, treatment with MOBAN® may continue if clinical symptoms are absent. Alterations of blood glucose, liver function tests, B.U.N., and red blood cells have not been considered clinically significant.

Metabolic and Endocrine Effects

Alteration of thyroid function has not been significant. Amenorrhea has been reported infrequently. Resumption of menses in previously amenorrheic women has been reported. Initially heavy menses may occur. Lactation associated with MOBAN® therapy has not been reported. Increase in libido has been noted in some patients. Impotence has not been reported. Although both weight gain and weight loss have been in the direction of normal or ideal weight, excessive weight gain has not occurred with MOBAN®.

Cardiovascular

Rare, transient, non-specific T wave changes have been reported on E.K.G. Association with a clinical syndrome has not been established. Rarely has significant hypotension been reported.

Ophthalmological

Lens opacities and pigmentary retinopathy have not been reported where patients have received MOBAN® (molindone hydrochloride). In some patients, phenothiazine induced lenticular opacities have resolved following discontinuation of the phenothiazine while continuing therapy with MOBAN®.

Skin

Early, non-specific skin rash, probably of allergic origin, has occasionally been reported. Skin pigmentation has not been seen with MOBAN® usage alone.

MOBAN® (molindone hydrochloride) has certain pharmacological similarities to other antipsychotic agents. Because adverse reactions are often extensions of the pharmacological activity of a drug, all of the known pharmacological effects associated with other antipsychotic drugs should be kept in mind when MOBAN® is used. Upon abrupt withdrawal after prolonged high dosage an abstinence syndrome has not been noted.

Tardive Dyskinesia

Although not reported with MOBAN® (molindone hydrochloride) late appearing dyskinesias have been associated with certain antipsychotic agents.

Tardive dyskinesia associated with other agents has appeared in some patients on long-term therapy and has also appeared after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). There may be involuntary movements of extremities.

There is no known effective treatment of tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine vermicular movements of the tongue may be an early sign of the syndrome and if the medication is stopped at that time the syndrome may not develop.

DOSAGE AND ADMINISTRATION Initial and maintenance doses of MOBAN® (molindone hydrochloride) should be individualized, and the minimal effective dose should be employed. Elderly and debilitated patients should be started on lower dosage.

DOSAGE SCHEDULE, BASED ON SEVERITY OF SYMPTOMATOLOGY

1. Mild—5 mg three or four times a day; an increase to 15 mg three or four times a day may be required.
2. Moderate—10 mg three or four times a day; an increase to 25 mg three or four times a day may be required.
3. Severe—daily dosage as high as 225 mg may be required.

DRUG INTERACTIONS Potentiation of drugs administered concurrently with MOBAN® (molindone hydrochloride) has not been reported. Additionally, animal studies have not shown increased toxicity when MOBAN® is given concurrently with representative members of three classes of drugs (i.e., barbiturates, chloral hydrate and antiparkinson drugs).

MANAGEMENT OF OVERDOSAGE Symptomatic, supportive therapy should be the rule.

Gastric lavage is indicated for the reduction of absorption of MOBAN® (molindone hydrochloride) which is freely soluble in water.

Since the adsorption of MOBAN® (molindone hydrochloride) by activated charcoal has not been determined, the use of this antidote must be considered of theoretical value.

Emesis in a comatose patient is contraindicated. Additionally, while the emetic effect of apomorphine is blocked by MOBAN® in animals, this blocking effect has not been determined in humans.

A significant increase in the rate of removal of unmetabolized MOBAN® from the body by forced diuresis, peritoneal or renal dialysis would not be expected. (Only 2% of a single ingested dose of MOBAN® is excreted unmetabolized in the urine.)

However, poor response of the patient may justify use of these procedures. While the use of laxatives or enemas might be based on general principles, the amount of unmetabolized MOBAN® in feces is less than 1%. Extrapyramidal symptoms have responded to the use of diphenhydramine (Benadryl*) and the synthetic anticholinergic antiparkinson agents (i.e., Artane*, Cogentin*, Akineton*).

HOW SUPPLIED As tablets in bottles of 100 and 1000 with potencies and colors as follows: 5 mg orange, 10 mg lavender, 25 mg light green.

*Benadryl—Trademark, Parke Davis and Co.
*Artane—Trademark, Lederle Laboratories
*Cogentin—Trademark, Merck Sharp & Dohme
*Akineton—Trademark, Knoll Pharmaceutical Co.

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TABLETS: 50 mg, 100 mg, 150 mg, and 200 mg thioridazine HCl, U.S.P.

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Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides; carefully consider benefit versus risk in less severe disorders. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy, observed primarily in patients receiving larger than recommended doses, is characterized by diminution of visual acuity, brownish coloring of vision, and impairment of night vision; the possibility of its occurrence may be reduced by remaining within recommended dosage limits. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; rarely, nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—Rare cases described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia. *Persistent Tardive Dyskinesia*—Persistent and sometimes irreversible tardive dyskinesia, characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and sometimes of extremities may occur on long-term therapy or after discontinuation of therapy, the risk being greater in elderly patients on high-dose therapy, especially females; if symptoms appear, discontinue all antipsychotic agents. Syndrome may be masked if treatment is reinstituted, dosage is increased, or antipsychotic agent is switched. Fine vermicular movements of tongue may be an early sign, and syndrome may not develop if medication is stopped at that time. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea; systemic lupus erythematosus-like syndrome.

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THE AMERICAN JOURNAL OF PSYCHIATRY

A Bicentennial Address: Benjamin Rush and Those Who Came After Him

BY FRANCIS J. BRACELAND, M.D.

In this Bicentennial year, the author takes a look at the early days of American psychiatry, focusing on some of the great men who helped to form the discipline. These men have much to teach us in a time when the field is divided within and faces a crisis of public confidence without. We can learn much from men like Benjamin Rush, who although they were actively involved in the social movements of their day, remained always the physician. Dr. Braceland suggests that it is time for psychiatry to move back into the mainstream of medicine, retaining, of course, mastery of psychotherapeutic techniques and knowledge of psychodynamics. This move can best be accomplished by employing the principle of complementarity, the art of encompassing different approaches to problems and utilizing the essentials of each to arrive at workable solutions.

How does one present a subject with so many facets as this one? A lengthy dissertation on the lives of Benjamin Rush and his successors, repeating what one could read in history books, would be deadly and would risk what Longfellow said of past history. He called it a puppet show in which a little man comes out and blows a trumpet and goes in again. You look for something new and lo, another little man comes out and blows a trumpet and it is all over. That, of course, we cannot risk.

It was decided finally to view the subject from the editor's perch, a generally pleasant place, elevated just enough to fan the ego of the occupant and encourage him to write about what has happened and what seems to be happening without being held too strictly to account.

Cervantes believed that history is the depository of great actions, the witness of what is past, the example and instructor of the present, and the monitor of the future. Carlyle saw the history of the world as the biography of great men and believed that no great man ever lived in vain. With this authority, one is heartened about taking a backward glance at psychiatry's origins in this Bicentennial year. In this paper I will briefly describe the contributions of some of the men who helped to form our discipline in an attempt to show how great men make history and the times make men great.

Earl Bond (1) warned that defining greatness is a hopeless task, for a great man is multifaceted and his greatness is partly his own and partly the product of unusual opportunities or environment. He thought that because great men have a harder time managing themselves than do average people, one should look for a common denominator not in the triumphs but in the troubles of great men. This is appealing to us, for we know that if anyone can get into trouble easily, it is a psychiatrist. However, we cannot award anyone the palm of greatness simply for having trouble, so we will only call him great who has done great things, taught others how they might be done, or described them with suitable majesty when they were done.

Thus circumscribed, I will report only on those of our ancestors who have something to teach us in our present situation. Reluctantly, I must perforce neglect many wonderful men who helped form our discipline.

Revised version of a special lecture written at the invitation of the Program Committee and presented at the 129th annual meeting of the American Psychiatric Association, Miami Beach, Fla., May 10–14, 1976.

Dr. Braceland is Editor of the *Journal* and Senior Consultant, Institute of Living, 200 Retreat Ave., Hartford, Conn. 06106. He is also Past President of the American Psychiatric Association (1956–1957) and Emeritus Professor of Clinical Psychiatry, Yale University.

THE FATHER OF AMERICAN PSYCHIATRY

There is no doubt that Benjamin Rush had troubles. In fact, he was usually in trouble, and history has had trouble placing him in proper perspective. He is known as the father of American psychiatry, although that paternal title has been disputed by some. Thomas Jefferson made known his disagreement with his friend Rush's treatment methods. James T. Flexner (2) went so far as to ask, "Was he Saint or Scourge?" William Bean, one of our contemporaries, castigated Rush for his foolish concept of fever. All of these men admitted that Rush's motives were pure and sincere, but Bean thought Rush's beliefs were one more example of man's innate capacity to fool himself.

Adolf Meyer (3) examined Rush's background thoroughly and decided he was an excellent teacher of medicine who urged his students to know man as an indivisible unit. Rush described the mind of man as the first production of creative power and wisdom in the world, and he believed that although all else will pass away, the mind of man will live forever.

Norman Dain (4), an excellent historian, saw Rush with all his faults as a transitional figure in the history of psychiatry, a man who broke with traditional belief—who insisted that mental illness be freed from moral stigma, that the mentally ill be treated with kindness, that their care be under the supervision of physicians, and that religious melancholia be treated with medicine rather than moralizing.

Rush wrote a letter to the managers of the Pennsylvania Hospital that is a classic and should be required reading for psychiatrists. The last paragraph was pathetic. He asked members of the Board to recall that he had advocated methods for the improvement of the conditions and comfort of the mentally ill under their care "long before it pleased God to interest me in their adoption by rendering one of my family an object of them" (5, p. 1067). His reference was to a brilliant son who killed a friend in a duel, became psychotic, and died on the wards his father had organized.

Rush was involved in all of the great reform movements of the day—abolitionism, prison reform, better education for women, etc. A signer of the Declaration of Independence, he also served as a member of the Continental Congress and as a physician in the Continental Army. He was the foremost physician of his day, and his prestige lasted over several generations. "European medical men called him the 'Sydenham of America' or the 'American Hippocrates' " (4, p. 22). Withal, the poor were his main concern, and he visited them in their huts and hovels. His watchword, "Take care of them and I will repay thee," became the motto of the Pennsylvania Hospital.

Rush's book *Medical Inquiries and Observations Upon the Diseases of the Mind* (6) was the first psychiatric text by an American and went through five editions between 1812 and 1835. What can be learned from this active, productive life other than that he consistently gave of himself? Perhaps the most important lesson is that although Rush was at the forefront of all the great social movements of the day, he remained always the physician, an important quality that is in danger of being forgotten by some of us today.

ELI TODD AND THE SPREAD OF MORAL TREATMENT

In 1812, Dr. Eli Todd, a young physician in Farmington, Conn., read Rush's *Medical Inquiries* with interest. Already at odds with the distinguished Philadelphian on certain basic points of medical practice, he then found himself in disagreement with Rush in regard to the treatment of the mentally ill. Todd was a gentle, quiet person (rather the antithesis of Rush) who understandably espoused the use of moral treatment. This approach involved gaining the patient's confidence, treating him with unfailing courtesy, and encouraging every healthy tendency within him. We can detect in this treatment influences that are today subsumed under the term "rehabilitation." None of it was scientifically expressed or scientifically formulated—it was treatment exercised purposefully day in and day out, and under this heading a small but advanced therapeutic community was brought into being.

Todd realized the need for follow-up after the patient left the institution. He also recognized the importance of work, as is evidenced in this paragraph from a letter he wrote to the family of a patient:

> I improve a moment on the eve of your son's departure . . . to express the pleasure I feel, in being able to restore him to his anxious friends, nearly, if not quite, as he was in his best days. . . . I cannot too strenuously urge the advantage, and even necessity, of his being immediately engaged in some regular employment . . . which shall hold out the promise of a moderate but fair compensation to his industry and prudence.[1]

Todd was the founder and first superintendent of the Hartford Retreat, now known as the Institute of Living. It was primarily through Todd's example that moral treatment spread throughout all of New England. He wrote little and paid only slight attention to theory. His greatest contributions were his example as a physician, his excellent hospital, his dedicated care of his patients, and his inspiration of a number of men who carried his methods and ideals with them to other New England hospitals. Among these men were several who became great in their own right: Samuel Woodward, the distinguished head of Worcester State Hospital; the brilliant and tragic Thomas G. Lee, who became the head of McLean Hospital; William Rockwell, the first superintendent of the Brattleboro Retreat; and Amariah Brigham, who succeeded Todd at the Hartford Retreat. These men were Todd's con-

[1]This letter is now in the Archives of the Institute of Living.

siderable legacy to American psychiatry, but he never quite received the credit he deserved.

A number of important New England hospitals were modeled after the Hartford Retreat, and the whole region benefited immeasurably from Todd's work and that of his pupils. Todd thus fulfills our criteria for greatness and brings to mind Chesterton's statement, "There is a [type of] great man who makes every man feel small, but a real great man is the man who makes every other man feel great."

Rufus Wyman of McLean Hospital should probably be mentioned with Todd, for the two men thought alike and installed similar systems in their hospitals. One never hears very much of Wyman, a phenomenologist, because he suffered from a condition not common in psychiatrists—he was modest and retiring and avoided the limelight. Although one heard little of his hospital or his work, both were of high calibre. Amariah Brigham extolled him as a man of ability, integrity, and devotion whose one fault was his excessive modesty.

OUR FIRST EDITOR

Amariah Brigham, one of Todd's better known disciples, was a brilliant, quiet, cultured cosmopolite. He typifies for us the axiom that "to be great is often to be misunderstood, and at times even to be persecuted because of misunderstanding." Brigham wrote one book, *Remarks on the Influence of Mental Cultivation and Mental Excitement Upon Health* (7), before he started his psychiatric career. Albert Deutsch called this book "By all odds the most popular of American works on psychosomatic medicine in the first half of the nineteenth century" and said it was a pioneer work in the area of mental hygiene known as child guidance (8, p. 327). The book's object was to awaken public attention to the need to modify educational methods, giving more attention to bodily health and less to cultivation of the mind in early life. "Early mental excitement," Brigham said, "will serve only to bring forth beautiful but premature flowers, which are destined soon to wither away without producing fruit" (7, p. 98).

Brigham was a fine man who did not hesitate to take textbooks with him when called in consultation. He wanted to know everything about the case. He was not above carrying a fishing pole along also, in case some inviting stream should beckon. Although he was deeply religious, Brigham, who became superintendent of the Hartford Retreat in 1840, warned of the dangers of the high emotional pitch being raised in the revival meetings of the day in his volume *Observations on the Influence of Religion Upon the Health and Welfare of Mankind* (9). In this work he quoted reports from religious papers of conversions at such meetings. Norman Dain notes that

> Fits and seizures were common among the audiences at revival meetings. In some cases the affected persons were clearly mentally unstable, if not insane, but credulous laymen as well as clergymen were diverted from recognizing them as such. In one example cited by Brigham, a religious paper reported the conversion of a man and woman through the Holy Spirit: the man fell to the ground, cold and still, as in death, while the woman "suddenly turned into a marble-like, cold and motionless statue; her eyes were fixed in her head, and many thought her to be dying . . . ." To Brigham these were obvious cases of "catalepsy," a form of mental illness. Even outside the hysterical atmosphere of the meetings, pathological behavior was often confused with religious fervor. Spiritualism, which was in vogue before the Civil war, produced similar effects. (4, pp. 189–190)

Brigham was sharply attacked by the clergy and the popular press as a materialist and a phrenologist. One critic in the *Christian Spectator*, a religious paper, noted that "the antiseptic quiet Brigham advocated would drive the healthiest person insane" and repeated the rumor that one person had had to be sent to a mental hospital as a result of reading Brigham's book (4, p. 191). Brigham felt it necessary to defend himself as a believer in God and a religious man. Although the situation in Hartford eventually quieted down, the feeling lingered on, and Brigham, who had expected to spend the rest of his life at the Hartford Retreat, accepted when he was asked to be the first superintendent of the New York State Lunatic Asylum in Utica.

In Utica, his restless energy again asserted itself, and in July 1844 he founded the *American Journal of Insanity*, which you know today as the *American Journal of Psychiatry*, and paid for it out of his own pocket. The *Journal* was well done and served to keep the practitioners of the new, loosely organized specialty in touch with one another. It was also undoubtedly one of the major factors leading to the formation of the Association of Medical Superintendents of American Institutions for the Insane, now the American Psychiatric Association. Brigham was one of the Association's 13 founders. Great man that he was, he possessed qualities that enabled him to meet and make great occasions.

AN ECLECTIC REFORMER

Samuel B. Woodward, another distinguished physician especially close to Eli Todd, was the first superintendent of the Worcester State Hospital (then the State Lunatic Hospital at Worcester), a position for which Todd had recommended him. His achievements at Worcester were so outstanding that in 1844 his colleagues elected him first President of the new Association of Medical Superintendents. He was imbued with an ardent social consciousness and believed that man has a religious obligation to better society and to help his fellow man.

As Grob notes (10), Woodward's medical remedies grew out of his empirical, commonsense approach. Unfortunately, his claims concerning the curability of in-

sanity received widespread attention and criticism in the 1830s and 1840s and set up what Deutsch called the "cult of curability."

In 1876, Pliny Earle reexamined Woodward's statistics (among others) in his volume *The Curability of Insanity: A Series of Studies* (11). He noted the drop in the cure rate at Worcester State Hospital over a 5-year period and pointed out that Woodward's statistics were inflated because he reported several recoveries for individuals suffering from recurrent disorders. However, a reexamination of Woodward's statistics years later proved that he was actually not too far wrong (12).

His annual reports, distributed in editions running as high as 3,000–4,000, served to initiate a crusade that would later be led by Dorothea Dix and other reformers. According to Pliny Earle, Woodward and Dorothea Dix gave to the profession and the world more than any other two people. The mentally ill of our country are indebted to these two individuals for awakening public interest in their behalf.

Two aspects of Woodward's beliefs merit our particular attention. The first is his eclecticism: Woodward borrowed from all schools of thought in his treatment approach. Eclecticism, a dirty word in the 1930s and 1940s, has come back into its own and is once again respectable. The second aspect is his belief that there was nothing worse for patients than inactivity of body and mind. Woodward was an ardent advocate of occupational therapy. We now read reports in the popular press of complaints of patients in state hospitals who used to make pin money doing simple uncomplicated chores but are now denied this opportunity because the law requires that they be paid the minimum wage, which few hospitals can do. So these patients sit idle and go without funds for simple necessities. I know, of course, that there were abuses of the system, but I believe they could be controlled today. "Progress" has overtaken us, however, and many patients who would like to work must remain idle.

THE GENTLE QUAKER

Thomas Story Kirkbride literally commands our attention, not only because of the excellence of his facility, The Pennsylvania Hospital, but also because his name is attached to the planning of numerous other institutions. His book, *On the Construction, Organization, and General Arrangements of Hospitals for the Insane* (13), was the standard text on this subject during the nineteenth century.

The year 1844 changed Kirkbride's life, for it was then that he joined with 12 men who carried on work similar to that which absorbed him. He had this group to dinner at his home on the hospital grounds the night before they were to meet at the Jones Hotel to form the Association that is our progenitor. For the rest of his life, Kirkbride pooled his thinking on the care of mental patients with that group, especially with Isaac Ray and Pliny Earle.

Although he was admired and respected, Kirkbride suffered a period of harrassment by a troublesome group led by a paranoid ex-patient who decided to use habeas corpus as a weapon. Scurrilous things were said and written about this gentle Quaker, who had the greatest respect for patients' rights. The following is from a letter in the *Reading Times and Dispatch*, November 13, 1871: "It appears to me that a man like this Kirkbride ought to be brought up on some charge that would be fatal to his liberty for the rest of his life" (quoted in reference 14, p. 125).

Another individual stated that

> If it is only necessary to get the certificate of two rascally physicians to certify to a person's insanity in order to incarcerate them in Kirkbride's hell then no man or woman in this community is safe. . . . We should feel very sorry to be compelled to counsel mob law, but it would be better that the walls of this earthly hell should be levelled to the ground than that sane people should be made the victims of its barbarity.

This type of prose and logic is still around today, although dressed up in a more scientific and humane garb and sounding a bit more temperate. Man's civil liberty, including the right of habeas corpus, is indeed precious and must be protected, but there is also a humane right to be taken care of when an individual is forlorn, alone, and unable to care for himself. Misunderstanding and fear of mental disease still lives in men's hearts, and it was used publicly against Kirkbride, one of the gentlest of men.

THE PIONEER OF FORENSIC PSYCHIATRY

Jacques Quen (15) said of another of our ancestors that

> with the possible exception of Adolf Meyer, no psychiatrist in 19th century America approached Isaac Ray's stature, or the breadth and magnitude of his contributions. . . . His concern for the welfare of the insane and the society they lived in evolved into a concern for justice on a broader scale. He was a reformer in a profound sense of the word. (15, p. 137)

In 1838, when Ray published his book *A Treatise on the Medical Jurisprudence of Insanity* (16), he was a general practitioner in a town of fewer than 2,500, far from any medical or legal center. Although Ray had no training at that time in either law or psychiatry, Quen has described this book as the first systematic exposition of medical thought about insanity in this country. Editions soon appeared in London and Edinburgh and the treatise was quoted extensively at the M'Naghten trial in England in 1843. Winfred Overholser said, "We have not even yet fully caught up with the reforms he advocated" (16, p. vii). When the fifth edi-

tion of the *Treatise* appeared in 1871, it was said that directly and indirectly it had done more than any other work to shape our laws and the decisions of our courts in regard to the insane. It was a pioneer work in American psychiatry and comparable in calibre to the textbook written by Rush.

Ray became superintendent of the State Hospital for the Insane at Augusta, Me., in 1841. Then, after careful study of the mental hospitals in Europe, he became the first superintendent of Butler Hospital in Providence, R.I. With the collaboration of the trustees of Butler and the help of his son, he made that hospital internationally known and respected.

In 1867, Ray reluctantly retired because of ill health, but even in his retirement years he was a power to be reckoned with. He confronted politicians and judges alike without fear or favor wherever he thought injustice was done, and Quen believes that he would have a few things to say to today's forensic psychiatrists.

THE FOUNDERS: A SUMMING UP

In our search for greatness we have of necessity been constricted, but we should keep in mind Earl Bond's opinion that the average ability of our Association's members has never been as high as was that of its 13 original founders. Albert Deutsch noted that they formed a group "alive with energy . . . great vitality, forceful will and abounding humanity. . . . Together, they tried to formulate their specialty into an integrated whole. . . . They eagerly strove to collect the facts and to use them to benefit their stricken fellow men" (quoted by Bond [14, p. 86]). I submit to you that this is a heritage of which we can be proud and which requires no apology.

The deficiencies of this group of founding fathers arose not so much from a lack of aims and ability as from the scarcity of knowledge. Theirs was of necessity a "here and now" philosophy. As physicians, they had only recently established their right to care for the insane over the claims of ministers and teachers. Also, medicine had only recently asserted that insanity was an illness and as such was within its province. Adolf Meyer reminded us that as late as 1894 a group of ministers in Germany wanted to be put in charge of mental patients. One cannot help but compare the situation with that today, as the medical model of mental illness is again under attack. In fact, the designation "medical model" seems to be used as an epithet by some.

THE CIVIL WAR PERIOD

We should pause to consider the admittedly low state of the discipline in the last half of the 19th century, as succinctly described by Zigmond Lebensohn:

> For reasons not altogether understood, the social upheavals caused by the industrial revolution led to changes in the social and cultural attitudes toward the mentally ill both in Europe and America after 1850, and most especially after the Civil War in our country. It was a time of incredible personal successes and catastrophic failures . . . of indifference to those who fell by the wayside, including the mentally ill. The moral treatment régimes in the earlier mental hospitals began to give away to this indifference. Hospital personnel were reduced to pawns in the rough and tumble politics of the day. Dirt, filth, overcrowding, and isolation from medicine became the rule, a rule that in the main prevailed until quite recent times. (17, pp. 381–382)

The story of the advancement of neurology in the Civil War period and of Weir Mitchell's stirring of the lethargy of the superintendents at the 50th anniversary of the founding of the Association in 1894 is interesting, but the details would be out of place here. To summarize, the appointment of neuropathologists to mental hospitals, the opening of a nursing school at McLean Hospital, and Adolf Meyer's insistence on careful case histories and mental, physical, and laboratory examinations all shed new light on the illnesses encountered and led to new and more hopeful concepts of mental disease.

Meyer kindled a spirit of research in the new American psychiatry that pulled the discipline out of its stagnant state and aroused the interest of a group of great men who adorned the field at the turn of the century. Unfortunately, there is not space in these pages to even list them, so I ask your permission to make the jump *quantum sufficit* to our present situation.

PSYCHIATRY TODAY

Van Wyck Brooks once said that an age is in chaos when one is living in it, and the past would be chaos too if it were not interpreted for us. To generalize about the present is a hazardous undertaking, but we are compelled to attempt it.

Psychiatry came out of World War II flush with great success. It had done an excellent job under difficult circumstances and had become an important sister discipline in medicine. But psychiatry came to be looked upon as the answer to everyone's problems. We had become too popular, and popularity is a heady wine. We became too diffuse and were pressed into undertaking too much. The results were inevitable, and we face them even now.

Today our discipline is divided within and faces a crisis of public confidence without. The question is asked: Does psychiatry have a future when it is looked upon by some of its critics as a policeman for the social order, "a covert penal system designed to maintain law and order"? (18). Eisenberg points out the contention of some "that mental ailments are problems of living and that people from his neighborhood are better able to treat the patient than doctors distant from him in status, education, and social class" (18, p. 1371). Others deny the whole concept of mental illness, and still others accuse the profession of being unrespon-

sive to the social problems of the day.

The opposite view is expressed by Henry G. Miller, a neurologist, who warns that "most of the abuses of the psychiatrist arise from his reluctance to restrict his activities to the field in which he is genuinely qualified to operate" (19). He notes that a psychiatrist is by definition one who treats mental disorders, not one who prevents wars, cures antisemitism, and battles similar evils. Every decent person abhors war, racism, and poverty and, like Rush, would do everything possible to correct these evils. But we were not trained in economics, sociology, or other disciplines that address problems as universal and old as civilized man.

Daniel Boorstin, Librarian of Congress, reminds us that ours is "the most motley and miscellaneous great nation of history, the first to use the full force of law and constitution and to enlist the vast majority of its citizens in a strenuous quest for justice for all races, creeds and ages" (20, p. 47). He believes that without a knowledge of the past we face the challenging present and uncertain future with nothing but abstractions and nebulous utopias, thus disregarding the "real chapter of history which can point the way toward that which is definitely humanly achievable."

The Move to Community Treatment

At this point, I would like to say a word or two about community mental health centers. I was on the committee that recommended their formation and chaired the committee that laid our ground rules for them. What we had in mind during those planning stages was the need to provide help closer to the homes of those who could not afford private psychiatric care, to have smaller, better staffed inpatient units, sheltered workshops, and emergency and follow-up outpatient psychiatric clinics—in short, to make available intelligent, compassionate care to all who needed help. It was modern day moral treatment, if you will, but somewhere along the line the coloration of some of the centers changed and a sociological-political outlook took over.

Pari passu with this change, there came into being the logical fallacy that since bad hospitals are bad for patients, any hospitalization is bad for patients and should be avoided entirely or made as brief as possible. Consequently, hospitals discharged many patients too soon, and the community centers were not yet equipped to treat them. Many of these patients were sent home, and in some cases children were exposed to psychotic individuals in various states of pharmacologically controlled remission. The end results of this are yet to be evaluated. Many discharged patients had no homes to go to or had homes that would not accept them, and they therefore gravitated to the streets, untreated and in danger of victimization. I will not go into a description of what is happening in some of our larger cities—we are all aware of it, and it is depressing. As the Director of the Psychiatric Section of Bellevue Hospital recently said, "some of it is straight out of Kafka."

A Return to Medicine

Amid the quarrels and cleavages of recent years, there have been remarkable resurgences in our understanding of the basic biological underpinning of some of the mental disorders. Psychopharmacology, neurophysiology, chemistry, and endocrinology have all contributed, and the work in these areas points to the direction we should take—a return to medicine, retaining mastery of psychotherapeutic techniques and psychodynamic understanding and keeping in mind all of the things we have learned through the years from our patients. Arnold Ludwig describes the problem eloquently:

> What is taking place is actually not psychiatry: the field has become a hodgepodge of unscientific opinions, assorted philosophies, and "schools of thought", mixed metaphors, role diffusion, propaganda, and politicking for "mental health" and other esoteric goals—all intermeshed with islands of sound, responsible psychiatric practice. (21, p. 603)

Ludwig adds that the only solid foundation for psychiatry is the medical model, which need not be limited strictly to established facts or scientific principles. "Medicine, as practiced both past and present, represents a blend of empirical observations, scientific knowledge, unproved assumptions, and folklore." What distinguishes it, Ludwig notes, is a philosophic orientation toward dealing with symptoms and signs that represent disease and the belief that eliminating these causes will result in cure or improvement.

There are volumes of experiential and medical documents confirming the inseparability of mind and body, but the capacity of the mind to regulate and heal itself and the body is constantly given short shrift in medical practice. For more than three decades, psychiatrists have been in daily consultation with our medical and surgical brethren and it is in the general hospital, the small private hospital, and the community ventures, properly oriented, that the future of psychiatry lies. I have no quarrel at all with the thought that in the future a great deal of what is now called "community mental health care" will be delivered by nonpsychiatric professionals. Some of them may indeed be better prepared than are psychiatrists to advise patients on problems of daily life. Psychiatrists will be reserved primarily for situations that clearly demand their expert medical skills. Eisenberg's comment on this subject is worthy of our attention:

> Psychiatry at its best is a paradigm for the general medical practice of the future. This may seem an outlandish claim for a field which boasts so few spectacular advances. Yet I believe it to be true because psychiatric practice deals with human distress in a context that must include the psychosocial as well as the biological. There are no imperialistic aims behind this claim. Quite to the contrary, in so far as psychiatry is successful in clarifying the psychobiological bases of health and illness, that knowledge will pass into the domain of the generalist and

> the psychiatrist will join other specialists in the secondary and tertiary cadres of the health system. (18, p. 1375)

There are many impending changes that will require all of us to keep abreast of medical progress. First are the coming requirements of continuing education and the possibility of relicensure. Second are the Professional Standards Review Organizations, one feature of which is particularly advantageous to psychiatry, namely that the reviews must take place within the framework of the rest of medicine. Thus we will be pushed back into the mainstream of medicine, and closer association with our medical confreres will be necessary as greater specificity of diagnosis and treatment is required of us.

Definite legal authority and accountability of the physician will also be called into play, and no one else can assume those responsibilities or even share them. Good medical care will be required. There are potential dangers, of course, e.g., the possibility that standardization will override good clinical practice, but one hopes that these dangers will be kept to a minimum.

THE FUTURE

How are we to accomplish the important move of psychiatry back into medicine? Perhaps we can make use of the phenomenon of complementarity, the art of encompassing different aspects and different approaches to a problem and utilizing the essentials of each to arrive at a workable answer.

Thomas Duane, in welcoming the freshman class of Jefferson Medical College in September 1973, spoke of Niels Bohr, who was able to reconcile the seemingly conflicting views of his fellow physicists on a question of the composition of light by noting that these views actually complemented each other. Bohr's great contribution was that he could see the overlap in the experiments and ideas of such men as Planck, Huygens, and Einstein and thus bring order out of chaos. He perceived that all of his colleagues were right and all were wrong, i.e., that each viewpoint was incomplete when expressed unilaterally. Realizing that these brilliant men had not carried their thinking to the next logical step, Bohr introduced into quantum theory one of its basic tenets, the theory of complementarity.

Bohr's contribution was not a compromise; rather, it was a gathering together of incomplete ideas. Bohr realized that this approach could be applied to many phenomena besides atomic physics. Duane believes the principle of complementarity should become a cornerstone of twentieth-century philosophy, and I present it to you as a hopeful vista for psychiatry.

Psychiatry is in trouble today because some of its practitioners are "hooked" on various seemingly contradictory approaches. But the quintessence of medical practice is complementarity, and for psychiatry—to use the vernacular—the principle "gets it all together." Complementarity encompasses both the science and art of medicine. There has been a right and wrong to the various theories put forth to the psychiatrist—the art is to hold fast to that which is right and which is good. Complementarity, therefore, should be our watchword.

In this Bicentennial year, I give you a rather kaleidoscopic view of our specialty, an admittedly intimate, personal view. We recall the axiom that progress moves not in a straight line but rather in the form of a spiral, each time around a notch or two higher. Although many of our patients are on the streets, as patients were 200 years ago, our research has advanced to the point where we can help most of them and prevent chronicity—if we can devise methods to get them into treatment.

Franklyn Arnhoff examined present social policy toward mental illness and found an indiscriminate shift from hospital to community treatment. He noted that

> Reinforcement for this position is provided by the most limited type of cost accounting and administrative statistics, from which it is fallaciously concluded that economies will be realized by such policies. Thus it is made to appear that humanitarian ends can be achieved at lower cost, an outcome that has obvious popular appeal. (22, p. 1278)

Arnhoff also noted that this approach will eventually result in the need to rediscover public mental institutions because there are unfortunately still large numbers of chronic psychotics who cannot survive outside an institutional setting.

Thus we will cross the same point in the spiral that we crossed 200 years ago, but this time at a much higher point. The situation is much more hopeful today because we have advanced our scientific knowledge and, one hopes, learned from past errors. Just as Weir Mitchell shook up the superintendents of the mental hospitals in 1894, it is now time for some of us to shake up the profession again by telling them a few homely truths. We have two givens: 1) there are many thousands of individuals who are emotionally and mentally distressed; and 2) we are physicians trained to care for the individual in his entirety—psyche and soma. If we stay within the confines of our discipline we can move in any direction that will be to the advantage of our patients. When we go beyond it, we become like any other stranger. There is a dignity to our specialty and a dignity to our heritage, and it is unwise to turn our backs on them.

Lastly, in these days of renewed interest in ethics, let me recall to you the advice given in 1716 by Sir Thomas Browne of *Religio Medici* fame:

> Live by old Ethicks and the classical rules of honesty. Put no new names or notions upon Authentic Virtues and Vices. Think not that morality is ambulatory, that Vices in one age are not Vices in another, or that Virtues which are under the everlasting Seal of Right Reason may be stamped by opinion. And therefore, though vicious times

invert opinions of things and set up new Ethicks against Virtue, yet hold thou unto old Morality.

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The Broad Role of Ego Functions Assessment

BY LEOPOLD BELLAK, M.D., AND MICHAEL SHEEHY, M.D.

The need for accurate assessment and accountability is of paramount professional concern to psychiatry. The authors state that ego functions assessment (EFA) is a reliable and valid quantitative technique, useful for these purposes in a variety of psychiatric settings. They suggest the various uses of EFA in five such areas: Professional Standards Review Organizations (PSRO) and third-party funding, forensic psychiatry and legal responsibility, the monitoring of psychotherapeutic drugs, research and planning in psychotherapy, and psychological testing. The authors conclude that EFA is a dynamically sophisticated and easily learned form of mental status examination and that its refinement by extensive use and simplification is likely.

THE CURRENT VIGOROUS DEMAND for greater accuracy in psychiatric thought has imposed a broad need for methods of personality evaluation that are statistically reliable and valid and at the same time useful in a considerable number of clinical settings. Ego functions assessment (EFA) constitutes an innovative means of meeting this need.

Because they serve as interlocking operational definitions of the psychoanalytic construct of the ego, the ego functions are embedded in a theory of personality that, despite years of critical assault, continues to influence the treatment of large numbers of psychiatric patients. The proper understanding and application of the operational nature of ego functions should go far to answer the objections that psychoanalytic theory has paid insufficient attention to the nature and logic of the relationship between abstract statements about the patient and observable clinical behaviors, a point recently emphasized by Chodoff (1).

Bellak and associates (2, pp. 74–79) described 12 ego functions. These are listed in appendix 1. In their study of schizophrenic patients, neurotic patients, and normal subjects, Bellak and associates demonstrated that the interrater reliability between two judges formally evaluating 100 individuals from these three categories (50 schizophrenic patients, 25 neurotic patients, and 25 normal subjects) on a 13-point scale ranged between .61 for the ego function of stimulus barrier and .88 for autonomous functioning, with a mean correlation of .77 (2, p. 302). Although these figures stem from the use of a specifically designed interview manual, ratings based on ordinary psychotherapeutic sessions allow for an interrater reliability of .72 (3).

The ability to make reliable ratings of different kinds of individuals without formally administered test instruments or rigid and unusual constraints on an interview represents a major asset of EFA and encourages its use in clinical treatment settings. Scoring is done by matching the findings of the clinical interview to the descriptive language of the rating manual, which contains detailed and specific anchor definitions for alternate scale points (2, pp. 438–442). Clinical findings representing an intermediate stage between adjacent points, e.g., 3 and 5, would be scored as such, i.e., 4. The same numerical point score for different ego functions indicates approximate equality in adaptive level. A score of 11 indicates "average" functioning as defined by the absence of any notable maladaptation or pathology but short of optimal functioning. Point 1 (maximal impairment) and point 13 (optimal functioning) serve primarily to orient the clinician to the possible extremes; only rarely would such points apply to an individual patient. An illustration from the manual (a description of the scoring of reality testing component A, the distinction between inner and outer stimuli) is given in appendix 2.

For clinicians who are not psychoanalytically oriented, EFA may be conceptualized as a standardized version of a mental status examination with substantial practical usefulness. The theoretical grounding of EFA in the matrix of interlocking psychoanalytic hypotheses, however, permits one who is so inclined to further relate ego functions to the nature of drive quality and quantity as well as to superego structures and the remainder of psychoanalytic theory. Reality testing, for instance, may be affected by either drive or superego. By way of experimental illustration, Levine and associates (4) found that hungry individuals shown tachistoscopic pictures perceived food more accurately (showing good reality testing due to motivated perceptual vigilance) than nonhungry control subjects when food was present in the pictures, but the hungry individuals also saw food when none was present (showing poor reality testing due to the need for wish fulfillment).

Within the ego itself any given component function can influence one or more of the other functions. A general idea of the potential impact of disturbed reality testing on thought processes and judgment is quite

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clear on the surface, but EFA allows more exacting assessment of the extent of the impact and, in turn, its relationship to other areas of ego functioning (2, pp. 105, 106). Without systematic EFA, many of these relationships may be far from obvious.

Although discussion in this paper and elsewhere often refers not only to specific ego functions but to an "ego" in some structural sense as well, the statistical analysis that provides the logical framework for EFA as a reliable and valid technique of assessment also justifies the concept of separate functions in a structural whole. This analysis demonstrates that the ego functions can vary with sufficient independence in a given individual to warrant separate identities while sufficient interrelationships exist to sustain conceptualizing the ego as a structural unit. Comparison of EFA with the Wechsler-Bellevue Intelligence Scales (WAIS) shows that the 11 subfunctions of intelligence delineated in the WAIS show a mean intercorrelation of .52 and the 12 ego functions assessed in schizophrenic patients, neurotic patients, and normal subjects show a mean intercorrelation of between .46 for schizophrenic patients and .61 for neurotic patients (2, p. 312). Such data support the construct of a whole composed of independent but overlapping subfunctions as much in the realm of the ego as in that of intelligence.

Keeping this briefly explained theoretical context in mind, we propose the use of EFA in the following five areas of psychiatric concern: 1) Professional Standards Review Organizations (PSRO) and third-party funding, 2) forensic psychiatry and legal responsibility, 3) the monitoring of psychotherapeutic drugs, 4) research and planning in psychotherapy, and 5) psychological testing. Although EFA is applicable to other areas of psychiatric endeavor, we believe that illustrations pertaining to these five areas serve to highlight its principal assets.

It is something of a truism to point out the contribution that reliable and valid assessment measures can make to any area of psychiatry. Nevertheless, it is the purpose of this paper to clarify the particular assets of EFA that are distinct from other instruments and that provide a perspective not found elsewhere.

PSRO AND THIRD-PARTY FUNDING

The development of standards for care is in the forefront of psychiatric concern today. Specifications for therapy and its outcome require definition.

Unlike diagnostic statements and typical symptom checklists, EFA measures the level of function at different times as well as the capacity for adaptation in such critical areas as judgment, impulse control, reality testing, and interpersonal relations. These are among the measurements that are most useful in making decisions about admission or discharge at inpatient facilities. Correctly identified, a patient's adaptive capacity should have clear consequences in determining the nature and setting of his or her treatment and, in turn, its cost—both in social and in dollar terms. One patient may require a costly hospitalization with its attendant disruption of work, family relationships, economic status, and self-esteem, while another with identical manifest symptoms may require outpatient treatment only. Most psychiatrists make such discriminations on grounds that range from the intuitive to the reasonably objective; however, anyone familiar with hospital practice is only too aware of the differences among psychiatrists in their decisions about admission or discharge. EFA provides a valid and reliable scheme for logical observation that can be keyed to hospital policy and can be clearly stated to government agencies, insurance companies, or other third-party payers.

Although certainly not a requirement of PSRO, the question of treatment results surely will become a matter of increasing concern to organizations funding psychiatric care. Symptoms are an excellent reference point for determining treatment results in any field of medicine. Loss of symptoms, however, may deceptively imply improvement (e.g., loss of chancre); continued manifest symptoms, on the other hand, may coexist with improved functioning and adaptive capacity, an area especially accessible to EFA. In addition, outpatient treatment often continues well past the time when initial symptoms abate; justification of the duration of therapy must then depend on measurements other than symptom relief alone. Problems such as the inability to sustain a close interpersonal relationship, as in marriage, are common in outpatient clinics and private practice settings but frequently fit into some of the least specific psychiatric diagnostic concepts, such as adjustment reaction of adult life or marital maladjustment. The degree of dysfunction in such cases is at present poorly specified, which in turn makes for great difficulty in evaluating change objectively. This very kind of evaluation may soon be a requirement when third-party payment is involved.

FORENSIC PSYCHIATRY AND LEGAL RESPONSIBILITY

Forensic psychiatry and the concept of legal responsibility represent a much embattled area. Aside from arguments about the role of psychiatrists in court, the specific nature of their testimony—especially their inclination toward conclusive remarks based on authority rather than explicit reasoning—has been widely attacked. Besides providing a statistically tested tool for evaluating a defendant in a format that exposes its logic to the jury, EFA would permit the pinpointing of specific behavioral difficulties. For instance, a defendant whose reality testing, thought functions, and judgment had been demonstrably normal throughout most of his life might be shown on formal EFA to have poor impulse control. An objective finding of this sort might point toward further investigation, e.g., in the area of

minimal brain dysfunction. Because it is the capacity of an individual to control his or her behavior that primarily determines legal responsibility, EFA seems to be an exceptionally useful tool in that it measures this capacity specifically from a number of reference points.

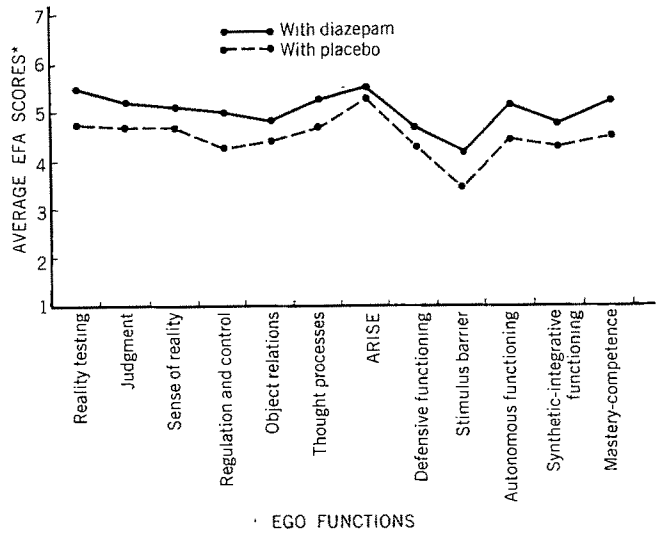
Outside the sphere of criminal responsibility, the evaluation of an individual in regard to the capacity to make a will or enter a contract requires a determination of his or her judgment and capacity to anticipate the likely consequences of his or her intended behavior as well as a number of other mental functions. Formal EFA makes the evaluation of these capacities explicit and provides a statistical understructure of reliability as well, a point of no small importance to a court system potentially deluged with often murky expert testimony.

THE USE OF PSYCHOTHERAPEUTIC DRUGS

Drug treatment of psychiatric conditions continues to suffer greatly from arbitrariness of prescription. The use of research criteria such as those of Feighner and associates (5) provides clarity of diagnosis and a rational basis for experiments in treatment but leaves undiagnosed many patients who fail to satisfy the strict criteria. Response to drugs can constitute a useful touchstone for diagnosis, as Klein and David (6), among others, have urged. The effects of neuroleptics on various ego functions in research studies can clarify diagnostic subcategories as well as give a clinical opportunity for EFA to identify the specific benefits of a drug to an individual patient. The following case report might clarify this point:

Case 1. A woman about 40 years old with a diagnosis of severe psychoneurosis was seen for psychotherapy twice a week for five and a half months. During this time the patient was alternated on a double-blind basis between 10 mg of diazepam (Valium) three times a day and matching placebo. Each medication was given for one or two weeks at a time, with each such length determined on a random basis. The patient was rated blindly for each ego function at each treatment session, using a 7-point scale. Only defined anchor points were used in this scale (convertible to the current standard 13-point scale by multiplying each score by 2 and subtracting 1). This patient's average scores are shown in figure 1 and table 1.

FIGURE 1
Comparison of Average EFA Scores of a Patient Treated with Psychoanalytic Therapy and Alternating Diazepam and Placebo



*1=maximal impairment; 7=optimal functioning.

TABLE 1
Comparison of Average EFA Scores of a Patient Treated with Psychoanalytic Therapy and Alternating Diazepam and Placebo

Ego Function	Average EFA Scores, by Drug Given		Significance*
	Diazepam	Placebo	
Reality testing	5.52	4.86	p<.01
Judgment	5.41	4.83	p<.01
Sense of reality	5.26	4.81	p<.05**
Regulation and control of drives, affects, and impulses	5.00	4.31	p<.01
Object relations	4.93	4.60	n.s.
Thought processes	5.35	4.70	p<.01
ARISE	5.57	5.53	n.s.
Defensive functioning	4.87	4.24	p<.01
Stimulus barrier	4.02	3.55	p<.01
Autonomous functioning	5.09	4.48	p<.01
Synthetic-integrative functioning	4.89	4.36	p<.05
Mastery-competence	5.09	4.55	p<.01

*By two-tailed t test.
**By one-tailed t test.

The use of EFA for this patient demonstrated a rather even level of improvement in most functions with the exception of object relationships and ARISE, which did not reach the level of statistical significance (3). The use of EFA also demonstrated a rather smooth level of improvement in nearly all of this patient's ego functions. This improvement could not have been deduced exclusively from the anti-anxiety effects of diazepam or from psychotherapy alone.

In another individual, careful EFA performed before treatment was started might point to a specific disturbance of impulse control as a particularly exaggerated problem, suggesting the use of a phenothiazine to decrease aggressivity or to facilitate its management. In other instances in which a disturbance in the sense of self is identified, e.g., in a borderline patient, phenothiazines may be contraindicated because of their tendency to aggravate this disturbance in nonpsychotic patients. Assuming poor impluse control and a disturbed sense of self are identified together by EFA, drug therapy could be directed at the symptom that ei-

ther was quantitatively greater or appeared to most severely impair the other ego functions.

In addition, the choice of two combined drugs and their dose levels might be determined with the aid of EFA. For example, the depressed patient who historically presents evidence of psychotic thinking could be given a baseline EFA and treated with tricyclic antidepressants, with phenothiazines added rationally almost by titration, depending on the changes in thought processes and the sense of reality that appear on follow-up EFA.

RESEARCH AND PLANNING IN PSYCHOTHERAPY

Plagued by problems of idiosyncratic content as well as different conceptual models of cause and cure, psychotherapy has proven a frustrating field for the researcher. The following case illustrates the application of EFA to before/after evaluation:

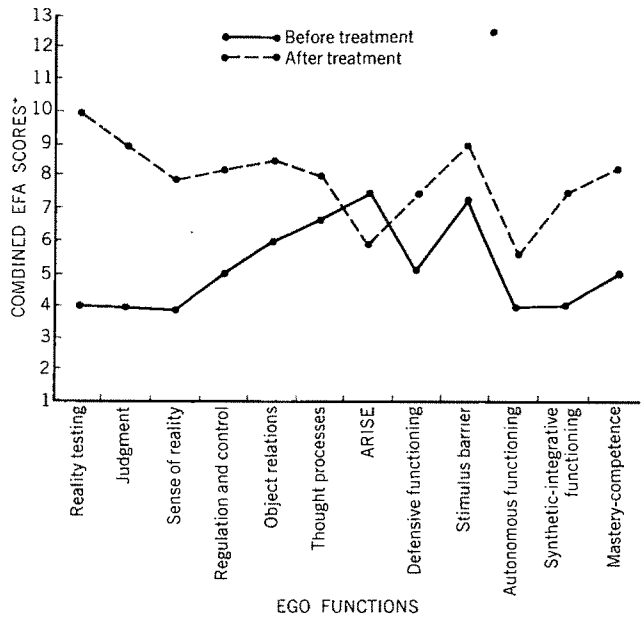
Case 2. The patient was a 24-year-old man who ran through the streets of a West Coast town one evening singing, shouting, disrobing, and setting fire to his clothes. He was hospitalized after being apprehended by the police. Just before this event he had suffered business and romantic reverses and developed grandiose ideas that appeared compensatory (i.e., he expected to be sent to Viet Nam to end the war). Simultaneously, he became afraid that any number of people might interfere with his plans; he felt spied on by the CIA and the FBI. He thought he was being observed on television and that people could read his mind. His apprehension by the police served to confirm these ideas.

After a brief hospitalization on the West Coast he was returned to the East Coast on a regimen of 800 mg of thioridazine (Mellaril) daily. He was hospitalized on the East Coast, EFA was performed, his medication was reduced, and psychotherapy was started. Because he improved in two weeks, the patient was discharged and treated in psychoanalytic therapy for the next two years. One year after he terminated treatment because of parental pressures he was reassessed. All EFA was done by two independent raters (2, pp. 385–391). The correlation of their scores was .67 ($p < .05$). Their combined ratings are shown in figure 2 and table 2.

Although this before/after evaluation cannot distinguish the effects of psychotherapy from spontaneous remission, the consequences of phenothiazine treatment, or the impact of current social factors, the data for this patient clearly demonstrate marked improvement in reality testing, judgment, sense of reality, regulation of drives, mastery-competence, and defensive and synthetic functions. The remaining ego functions did not show statistically significant changes. Clinically, the patient appeared free of his previous symptoms, was employed, and had a satisfying social life.

The problems of distinguishing treatment effects from changes that are independent of specific treatment are dilemmas of research design. Using EFA, however, with the patient as his or her own control, the effect of interpretative and interpersonal efforts can be studied at close range for their consequences at the same time that an objective record of general progress or deterioration is assembled to provide corrective feedback in the treatment process.

FIGURE 2
Comparison of Combined EFA Scores of a Patient Rated by Two Evaluators Before and After Two Years of Psychoanalytic Therapy



*1=maximal impairment; 13=optimal functioning.

TABLE 2
Comparison of Combined EFA Scores of a Patient Rated by Two Evaluators Before and After Two Years of Psychoanalytic Therapy

Ego Function	Combined EFA Scores, by Time of Evaluation: Before Therapy	After Therapy	Significance*
Reality testing	4.0	10.0	$p<.01$
Judgment	4.0	9.0	$p<.01$
Sense of reality	4.0	8.0	$p<.01$
Regulation and control of drives, affects, and impulses	5.0	8.0	$p<.05$
Object relations	6.5	8.5	n.s.
Thought processes	8.0	8.5	n.s.
ARISE	7.5	6.0	n.s.
Defensive functioning	5.0	7.5	$p<.05$
Stimulus barrier	7.5	9.0	n.s.
Autonomous functioning	5.0	5.5	n.s.
Synthetic-integrative functioning	4.0	7.5	$p<.01$
Mastery-competence	4.0	8.0	$p<.01$

*By chi-square test with correction for continuity.

PSYCHOLOGICAL TESTING

Psychological testing remains a very valuable asset in patient assessment and an important guide to therapy as well. There must be a close and rational relationship between psychodiagnostic test data and diagnostic inference, preferably given in a report that links conclusions to explicit primary patient responses. EFA

clearly has a role to play in analysis of the data from the current battery of standard tests (7). EFA is designed in a fashion that makes its workings operational and available for inspection and countercheck. The relationship it bears to the larger structure of psychoanalytic hypotheses makes it especially useful in planning and evaluating treatment.

CONCLUSIONS

Although it presents only a partial answer to some of the numerous problems of assessment facing psychiatry, EFA does constitute a statistically reliable and valid means of evaluating personality in operation, which makes it useful in many areas of psychiatry.

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APPENDIX 1
Ego Functions and Their Components

1. *Reality Testing*
   a. Distinction between inner and outer stimuli
   b. Accuracy of perception of external events
   c. Accuracy of perception of internal events

2. *Judgment*
   a. Anticipation of consequences of intended behavior
   b. Manifestation of this anticipation in behavior
   c. Appropriateness of behavior to external events

3. *Sense of Reality*
   a. Extent of derealization
   b. Extent of depersonalization
   c. Self-identity and self-esteem
   d. Clarity of boundaries between self and world

4. *Regulation and Control of Drives, Affects, and Impulses*
   a. Directness of impulse expression
   b. Effectiveness of delay mechanisms

5. *Object Relations*
   a. Degree and kind of relatedness (narcissistic attachment or symbiotic object choices)
   b. Primitivity versus maturity
   c. Degree to which others are perceived independently of self
   d. Object constancy

6. *Thought Processes*
   a. Memory, conception, and attention
   b. Ability to conceptualize
   c. Primary versus secondary process as reflected in communicative language

7. *Adaptive Regression in the Service of the Ego (ARISE)*
   a. Ability to regressively relax cognitive acuity
   b. Ability to allow new configurations to emerge in thinking

8. *Defensive Functioning*
   a. Weakness or obtrusiveness of defenses
   b. Success or failure of defenses

9. *Stimulus Barrier*
   a. Threshold for stimuli
   b. Effectiveness of management of excessive stimulus input

10. *Autonomous Functioning*
    a. Degree of freedom from impairment of primary autonomy apparatuses
    b. Degree of freedom from impairment of secondary autonomy apparatuses

11. *Synthetic-Integrative Functioning*
    a. Degree of reconciliation of incongruities
    b. Degree of active relating together of events

12. *Mastery-Competence*
    a. Competence (how well a person performs in relation to his or her capacity to actively master and affect his or her environment)
    b. Feeling of competence as measured by person's expectations of success on actual performance
    c. Discrepancy between actual competence and feeling of competence

APPENDIX 2
Scoring of Reality Testing Component A: Distinction Between Inner and Outer Stimuli

Point 1 (maximal impairment)
Hallucinations and delusions pervade.
Minimal ability to distinguish events occurring in dreams from those occurring in waking life and inability to distinguish among idea, image, and hallucination.
Perceptual experience is grossly disturbed (e.g., moving things look still and vice versa).

Point 3
Hallucinations and delusions are severe but limited to one or more content areas.
Patient may show considerable doubt about distinguishing whether an event really happened in his or her mind or in a dream.

Point 5
Illusions are more likely to be found than hallucinations.
Patient may be aware that he or she sees and hears things that are not there, but he or she knows that others do not see or hear them.

Point 7
Projections of inner states onto external reality is more likely than frank hallucinations or delusions.
A "stimulus-bound" reality testing may occur at the cost of libidinal investments and gratification.

Point 9
Confusion about inner and outer states occurs mainly upon awakening, going to sleep, or under severe stress.

Point 11
Inner and outer stimuli are well distinguished.
Occasional denial of external reality in the service of adaptation.

Point 13 (optimal functioning)
Clear awareness of whether events occurred in dreams or waking life.
Correct identification of the source of cognitive and/or perceptual content as being idea or image and accurate identification of its source as internal or external.
Distinction between outer and inner percepts holds up even under extreme stress.
Checking one's perceptions against reality occurs with a very high degree of automaticity.

Prompt Publication Policy

The *Journal* would like to remind authors who are particularly interested in early publication (whether to establish priority of an idea, reveal innovative results of new research, or for other pressing reasons) of its prompt publication policy. Under this policy, short (maximum of six double-spaced pages) manuscripts will be considered for publication in the Brief Communications section of the first available issue. These manuscripts must still undergo expert scrutiny before being accepted, and two months must be allowed for the printing process. However, the time required for publication of these short articles can be lessened considerably.

Authors who would like to have their manuscripts considered under this policy should indicate this desire, as well as the reasons for it, when they submit their manuscripts.

Depression and the Reintegration Phase of Acute Schizophrenia

BY PATRICK T. DONLON, M.D., RICHARD T. RADA, M.D., AND KRISHAN K. ARORA, PH.D.

The authors found moderate to severe depression in 60% of a group of schizophrenic patients experiencing acute decompensations (N=30). The course of the depression was followed over an 8-week period, during which patients were treated with depot fluphenazines. There was a statistically significant reduction in depression that closely paralleled the correction of the cognitive disorder. The authors discuss problems in identifying and quantifying depression during acute schizophrenic decompensation and suggest that the Hamilton scale anxiety/depression factor and the BPRS depression factor may be useful diagnostic tools.

ALTHOUGH DEPRESSION may appear at any point during the course of schizophrenia, it is characteristically more prevalent and severe during periods of psychotic exacerbation (1). These periods may be divided into two general phases: decompensation and reintegration. A previous report (2) described four phenomenological stages of the decompensation phase: 1) early and fluctuant cognitive and perceptual disturbance, 2) the ego's attempt to cope and defend against psychotic decompensation and the depression frequently associated with it, 3) the acute breakdown in reality testing, with panic and marked dysphoria, and 4) the more chronic and quiescent stage associated with marked autistic preoccupation and idiosyncratic interpretation of stimuli and concepts. Depression normally peaks with the transition from the second to the third stage. However, if the course of schizophrenia continues unabated and moves into the fourth stage, clinical evidence of depression and of other forms of subjective distress is much less apparent. The phenomena and stages seen during the reintegration phase are similar, although they occur in reverse order (2, 3). Depression is commonly associated with both the reintegration and postpsychotic periods (4).

The purpose of this study was two-fold. First, we investigated the relationship between the depressive and cognitive component in reintegrating schizophrenic patients. Second, we examined the efficacy and safety of a depot phenothiazine—either fluphenazine enanthate (FE) or fluphenazine decanoate (FD)—with acutely decompensated schizophrenic patients. This paper will present only those aspects of the study relevant to the first purpose; data on the efficacy and safety of the fluphenazines are presented elsewhere (5).

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The authors wish to thank Robert Kellner, M.D., University of New Mexico, for his suggestions on this paper.

METHOD

The study was conducted on the inpatient service of the University of California, Davis, Sacramento Medical Center.

After giving informed consent, 41 acutely decompensated schizophrenic patients were randomly assigned to treatment with either FE or FD in a double-blind, flexible-dosage protocol. All patients were diagnosed as having paranoid or undifferentiated schizophrenia. Twenty-four patients had previously been stabilized on neuroleptic medication at some time before their hospitalization. None of the patients had a history of significant affective disorder, and individuals with a history suggestive of manic-depressive illness or schizo-affective disorder were excluded from the study.

The study period was 8 weeks; patients discharged before that time were followed on an outpatient basis. Patients were seen daily during hospitalization and at least weekly after discharge.

Evaluation instruments included the Brief Psychiatric Rating Scale (BPRS) (6), the Clinical Global Impression Scale (CGI), the Hamilton Rating Scale for Depression (7), and the Zung Self-Rating Depression Scale (8). All of these scales rate severity of symptoms from absent to extreme, with higher numbers representing greater pathology. The BPRS and CGI scales range from 1 to 7. The Zung scale ranges from 1 to 4 and the Hamilton scale from 0–2 to 0–4. Patients were rated when they entered the study, once a week during the first 4 weeks, and at 6 and 8 weeks after admission. Baseline ratings were, in general, done on the day of hospitalization and in all cases were completed before administration of study medication.

Eighteen of the patients underwent psychometric testing at the beginning and end of the study. The tests included the Benjamin Proverb Test, the Discomfort Relief Quotient Rating, and the Looseness of Association Index, which is derived from a 5-minute free association interview (9).

A 4-point global drug efficacy rating, ranging from 1 (marked therapeutic effect) to 4 (unchanged or worse) was made at the end of the 8-week period.

RESULTS

Of the 41 patients who started the study, 30 completed the first month. Three patients dropped out during the second month (2 left the treatment area and 1 requested oral medication). Thus 27 patients completed the 2-month study; data will be presented for the 30 subjects who completed at least 1 month.

There were 12 men and 18 women ranging in age from 18 to 57 years (mean=30). Most subjects were in social classes IV and V (10).

Evaluation of Antipsychotic Response

There were no significant differences in the therapeutic efficacy of fluphenazine enanthate and fluphenazine decanoate (5). Each was highly effective in producing rapid amelioration of acute psychotic symptoms and continued symptom remission. On the CGI, all patients treated with FE and FD showed statistically significant ($p<0.01$) improvement at 4 weeks, 8 weeks, and at discharge. Patients on FE, however, became slightly worse after discharge, then improved again. The 18 patients who had been given psychometric tests showed a striking and uniform decrease in cognitive disorganization associated with neuroleptic administration (9).

Evaluation of Depression

Depression, as rated on the BPRS and the Hamilton scale, was greatest at baseline and decreased over the study period. The reduction in depression closely paralleled improvement in cognitive symptoms on the BPRS. There was no significant difference in degree of baseline depression between the FE and FD groups on either measure.

The BPRS data (table 1) demonstrate a striking relationship between the reductions in depression and thought disorder. Both were most marked in severity at baseline and decreased over time. The 1 patient who deviated from this pattern was a 26-year-old man whose depression could be more appropriately termed postpsychotic. He had no history of affective disorder and his premorbid personality was shy, sensitive and withdrawn. He was experiencing his first psychotic episode and he had never been on neuroleptic medication.

The data for the 4 BPRS depression items (11) and

TABLE 1
Mean BPRS Scores for Depression and Thought Disorder

Factor	Group*	Baseline	Study Week 1	2	3	4	6	8
Depression								
Somatic concern	FD	2.29	3.14	3.00	2.43	2.79	2.71	2.74
	FE	3.06	2.38	2.44	2.38	2.81	2.67	2.36
Anxiety	FD	3.64	3.29	3.43	3.43	3.00	3.00	3.12
	FE	3.56	3.38	.325	3.25	3.38	3.41	3.34
Guilt feelings	FD	2.79	2.00	2.00	2.21	1.86	1.71	1.71
	FE	2.13	1.63	1.75	2.19	1.94	2.21	1.80
Depressive mood	FD	3.71	2.71	2.93	3.07	2.79	2.79	2.65
	FE	3.44	2.88	2.94	3.00	3.00	3.20	2.56
Overall	FD	3.36	2.79	2.84	2.79	2.61	2.55	2.55
	FE	3.05	2.56	2.59	2.70	2.78	2.87	2.53
Thought disorder								
Conceptual disorganization	FD	5.36	3.36	2.86	2.79	2.43	2.36	2.38
	FE	5.43	3.13	2.88	2.75	3.05	2.78	2.41
Grandiosity	FD	1.79	1.79	1.79	1.50	1.21	1.43	1.20
	FE	2.94	1.94	2.13	2.06	1.88	1.94	1.78
Suspiciousness	FD	3.14	2.36	2.14	2.21	1.79	1.93	1.70
	FE	3.19	1.94	2.19	2.19	2.15	2.18	1.84
Hallucinatory behavior	FD	4.79	2.43	2.07	1.50	1.57	1.50	1.09
	FE	4.44	1.50	1.50	1.38	1.51	1.69	1.39
Unusual thought	FD	5.29	3.36	3.07	2.57	2.50	2.36	2.15
	FE	5.44	3.13	3.00	2.88	3.05	2.89	2.52
Overall	FD	4.07	2.65	2.39	2.11	1.90	1.93	1.70
	FE	4.29	2.33	2.34	2.25	2.33	2.30	1.99

*FD indicates treatment with fluphenazine decanoate and FE with fluphenazine enanthate. There were 14 patients in the FD group at all points and 16 in the FE group except for week 3 (N=15) and weeks 6 and 8 (N=13).

TABLE 2
Mean Hamilton Scale Depression Factor Scores

Factor	Group*	Baseline	Study Week 1	2	3	4	6	8
Sleep disturbance	FD	0.98	0.51	0.31	0.52	0.54	0.45	0.35
	FE	0.96	0.42	0.29	0.41	0.29	0.35	0.25
Somatization	FD	0.76	0.67	0.64	0.59	0.44	0.41	0.42
	FE	0.70	0.45	0.32	0.47	0.50	0.76	0.71
Anxiety/ depression	FD	1.25	0.79	0.79	0.84	0.63	0.57	0.53
	FE	0.96	0.66	0.75	0.82	0.80	0.93	0.65
Apathy	FD	1.59	1.00	1.02	0.78	0.88	0.72	0.81
	FE	1.46	1.23	0.94	1.12	1.00	1.07	0.99

*Groups and Ns are as indicated in table 1.

TABLE 3
Mean Zung Scale Index Scores

Week	Group FD N	FD Mean	FE N	FE Mean
1	7	55.6	14	59.8
2	12	56.2	16	55.9
3	14	59.3	14	60.3
4	14	58.7	16	56.8
6	14	55.2	13	57.9
8	12	53.8	11	54.4

the 5 thought disorder items (see table 1) were subjected to analysis of variance (repeated-measures) both as individual items and as factors. The baseline scores suggest that the patients in the two drug groups were about equally ill. Both drugs showed statistically significant ($p<.05$) efficacy on all but 1 item as the study progressed. Anxiety scores for patients on both drugs remained about the same.

At baseline, 12 patients had a mean depression score of 3 or less, 17 patients, greater than 3 but less than 5, and 1 patient scored between 5 and 7. Thus 40% of the subjects were not significantly depressed as measured by the BPRS, 57% were moderately depressed, and 3% were severely depressed. At termination, only 8 patients (27%) had a depression score above 3, indicating a marked reduction in clinical depression for the group. Of the 3 subjects who were followed for only 4 weeks, 1 was rated as moderately depressed and 2 as not significantly depressed at termination.

The Hamilton scale yielded similar results (see table 2). This scale can be divided into four factors: sleep disturbance (early, middle, and late insomnia), somatization (somatic anxiety, somatic symptoms-gastrointestinal, somatic symptoms-general, genital symptoms, and hypochondriasis), anxiety-depression (depressed mood, guilt, suicidal ideation, agitation, and anxiety), and apathy (loss of interest in work, activity, and insight). Average scores for each factor are reported in table 2.

The baseline scores indicate that patients treated with FD were initially as sick or somewhat worse than those treated with FE. Efficacy of fluphenazine is obvious from the fact that both drugs showed statistically significant ($p<.05$) improvement across time for all factors except somatization for FE. The patients on FE showed transient reduction in somatic symptoms but returned to baseline level at termination.

At baseline, 15 patients had a mean score of 1 or less on the anxiety/depression factor, 12 patients had scores between 1 and 2, and 3 patients, greater than 2. At termination, only 5 patients (17%) had scores above 1, a marked decrease for the group.

Table 3 gives mean index scores on the Zung scale—baseline scores were not obtained because of the patients' grossly psychotic states. There were moderate fluctuations in the scores for the various rating periods but no significant changes for either group.

DISCUSSION

Sixty percent of these schizophrenic patients experienced depression as a prominent component of their acute schizophrenic process, a finding that confirms previously reported data (2). In this study, depressive symptoms were most marked during overt schizophrenic decompensation. Reduction in depression is closely correlated with the remission of the cognitive disorder.

Comparatively little attention seems to have been given by researchers and clinicians to the depressive component of schizophrenia. This may be due in part to the difficulty of diagnosing and quantifying depression during the acute schizophrenic process. Diagnosis can be difficult because schizophrenia and depression share certain signs and symptoms, including psychomotor disturbance, hypochondriasis, appetite and sleep disturbances, apathy, impulse control impairment, and weight loss. If the diagnostician is biased in favor of one of the diagnoses, he may use these overlapping symptoms to further substantiate his initial impression. The addition of neuroleptic medication can complicate the diagnosis because drug-induced aki-

nesia can produce a clinical picture of apathy and psychomotor retardation that resembles depression.

In addition, depression (like other affects) may be more labile and transitory in overtly psychotic schizophrenics than the persistent mood seen in depressive disorder. Further, the depressive symptoms may be overshadowed by more overt cognitive and behavioral disturbances.

Therefore, in order to identify and quantify depression in schizophrenia, we focus on depressive mood and attitude (guilt, remorse, self-degradation, suicidal concern, pessimism, despair, helplessness, and hopelessness). We feel that the depressive factor of the BPRS and the anxiety/depression factors of the Hamilton scale are more useful in identifying and quantifying depression than the Hamilton somatization, apathy, and sleep disturbance factors, which include symptoms shared by both disorders.

The Zung scale was not useful because the data were inconsistent and the grossly psychotic state of the patients made it impossible to obtain baseline scores.

Depression was most marked at baseline and improved over time after administration of the two drugs. The 1 previously described exception was a patient who experienced substantial depressive symptoms after his schizophrenic symptoms remitted but whose depressive symptoms subsided and were unremarkable by the end of the study.

DeAlarcon and Carney (12) recently reported that 16 of their patients originally diagnosed as schizophrenic developed depression (including 5 suicides) after treatment with depot fluphenazines, which suggested that these drugs might be depressogenic. With the exception of the 1 case noted previously, our data indicate that depot fluphenazines are *not* depressogenic and in fact may have an antidepressant effect in acutely decompensated schizophrenic patients. However, the reduction in depression may be explicable by factors other than an antidepressant effect of neuroleptic medication. First, correction of the cognitive disturbance by the neuroleptic agent could reduce the depression by giving the patient greater cognitive control. This hypothesis is supported by numerous carefully monitored studies which show that the clinical action of neuroleptics is predominantly correction of the thought disturbance and not reduction in anxiety (13). Second, the placebo effect and therapeutic value of being a participant in a research project could be depressolytic.

The association of depression with schizophrenic decompensation is not surprising. Schizophrenia is a subjectively frightening and severely disabling illness. It is therefore not surprising that the schizophrenic individual would suffer from depression. Levin (14) contends that there is a depressive core in all schizophrenic patients. With the breakdown of cognitive control and defenses (e.g., denial) during decompensation, affects (including depression) become prominent and subside only when the patient regains cognitive control during reintegration. Our data, however, indicate that 40% of the schizophrenic patients had no depression despite acute decompensation and loss of cognitive control. Thus, a depressive core does not seem to be universal in schizophrenic patients in the reintegration phase.

Depression in schizophrenia is frequently considered secondary or reactive and thus analogous to depression in individuals with serious or distressing medical disorders. Recently, Akiskal and McKinney (15) reviewed the various theories of the origin of depression and stressed the collating role of the diencephalon in integrating the various depressogenic determinants, with a resultant clinical depression. Thus, there may be multiple biologic, psychological, and environmental determinants. It is not now known how these determinants vary in individuals who have primary affective disorders and those who have depression within schizophrenia. We also do not know whether schizophrenic patients who experience depression during decompensation and those who do not represent two distinct subgroups of the illness.

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Postpsychotic State, Convalescent Environment, and Therapeutic Relationship in Schizophrenic Outcome

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The authors evaluated the following variables in the 2–3-year outcomes of 30 schizophrenic patients: the acute/chronic dichotomy, the presence of a postpsychotic regressive state, the quality of the convalescent environment, and the formation of a therapeutic relationship. They found that the presence of a postpsychotic regressive state was not associated with either good or poor short-term outcome; that the diagnosis of acute schizophrenia was almost invariably followed by good outcome, but a diagnosis of chronic schizophrenia had little predictive value; and that a favorable convalescent environment and the presence of a therapeutic relationship were significantly associated with good outcome.

THIS STUDY was undertaken to determine the relative influence of several distinct variables on the short-term outcome of young adult schizophrenia. In the past, there have been attempts to correlate an almost endless variety of factors with good and poor prognosis. Individual features that have been identified as having some enduring validity for good outcome include premorbid social adjustment (1, 2), acute onset (3, 4), confusion (5, 6), the presence of guilt (7), evident manic and/or depressive features (8, 9), and family history of clinical depression (9, 10). Although each of these factors has limited value as a predictor, their predictive ability increases to approximately 80% when they are combined, as Vaillant (10) and Stephens and associates (11) have shown. However, alone and collectively, these features all underlie a common developmental presumption, namely, that the age-appropriate development of affect, interpersonal relations, and individuation correlates positively with good outcome. Unfortunately, this tells us little more than we already knew. People who were more severely impaired before an overt decompensation are less likely by definition to have a good outcome, even if they recover to their status quo ante. It also has limited usefulness for influencing outcome because it presumes that outcome is, in a sense, preordained, i.e., that the natural course is intrinsic to the illness.

Statistical investigations focused on the psychotherapy of schizophrenia have of necessity minimized this intrinsic outcome perspective. In these studies therapeutic interventions are observed in reference to a specific outcome measure, such as one or more of the following: relapse of psychosis, rehospitalization, vocational functioning, social adaptation, and severity of symptoms. Most studies have clearly supported the effectiveness of chemotherapy in most facets of good outcome (12–17). In light of the almost incontestable therapeutic efficacy of neuroleptics in the treatment of most schizophrenic patients, it is important to determine what factors other than the neuroleptics and premorbid developmental level contribute to a better outcome.

This paper focuses on several other concomitant influences, namely, the presence of a postpsychotic regressive state, the quality of the convalescent environment, and the presence of a therapeutic relationship. We were also interested in seeing how effectively the acute/chronic dichotomy would correlate with outcome.

In a previous paper (18) one of us noted that a postpsychotic state characterized by such manifestations as passivity, neurasthenia, thought scattering or clogging, affective blockade, and, often, depression succeeded the psychotic episode in 13 schizophrenic young adults who had good outcomes. The therapeutic efficacy of resolution of this postpsychotic state was postulated to be a crucial factor for an enduring good outcome.

Schizophrenia surely does not end with the remission of the psychosis. Further recovery, if it is to take place, does so in a particular social context. Therefore, we attempted to assess the effects of the convalescent environment on outcome.

Although it is a well-established clinical maxim that the therapeutic relationship itself is the crucial ingredient in the therapy of schizophrenia, little system-

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This research is part of an extensive program investigating schizophrenia that is being conducted jointly by the Department of Psychiatry, Psychosomatic and Psychiatric Institute, Michael Reese Hospital and Medical Center; Pritzker School of Medicine, University of Chicago; and the Illinois State Psychiatric Institute. This research is supported in part by Alcohol, Drug Abuse, and Mental Health Administration grants MH-18991 and MH-19477 from the National Institute of Mental Health and by grants 131-13RD and 218-12RD from the State of Illinois.

atic work has been done in this area. In their comprehensive examination of therapeutic process in schizophrenia, Rogers and associates (19) concluded that the actual relationship with the therapist was more pivotal for schizophrenic patients than for psychoneurotic control patients. Unconditional positive regard and congruence were more important than accurate empathy to the schizophrenic patients. In our study, therefore, we were interested to see if the presence or absence of a therapeutic relationship affected outcome.

The fact that this is a preliminary study should be clearly noted at the outset of this report. Because of the small numbers of patients followed so far, any conclusions will, of necessity, be tentative. However, it is hoped that even with these small numbers and the limited length of follow-up we can begin to clarify some clinical aspects in the outcome of overt schizophrenic illness.

METHOD

The 30 young adults we studied had been admitted to the Psychosomatic and Psychiatric Institute of the Michael Reese Medical Center. They ranged in age from 16 to 36. Each patient was interviewed by a senior psychiatrist after informed consent was obtained. Each tape-recorded interview was rated on a number of variables, after which a diagnosis was made by the consensus of at least two members of the research team. The specific methods are detailed in a previous study by Grinker and Holzman (20). Cognitive studies, vestibular testing, eye scanning, psychological testing, family studies, and behavioral ratings were also conducted on many of the young adults interviewed and diagnosed.

A follow-up questionnaire specifically designed for this study has been sent to each patient annually after his or her discharge. This questionnaire can be given an outcome score using the Strauss-Carpenter Scale (21), which measures social and vocational adjustment as well as frequency of symptoms and rehospitalizations. Strauss and Carpenter found that a score of approximately 13 corresponded to the average outcome of neurotic patients, whereas a score of 11 corresponded to the average outcome for schizophrenic patients. Furthermore, a recent scoring of 24 normal control subjects from a local university yielded scores between 12 and 15, with a mean score of 13.9. Therefore, in this study we have considered good outcome to be a Strauss-Carpenter score of 12–16 and poor outcome to be any score below 12.

Chronic schizophrenia was diagnosed in accordance with the Grinker-Holzman criteria (20) and defined as a long-standing experience of inner turmoil and social incompetence with clear psychotic symptoms but without the appearance of an acute psychosis. A gradually developing psychosis is the usual picture. Acute schizophrenia was diagnosed when there was a sharp, rather sudden appearance of a psychotic episode after a period of good adjustment. For purposes of this study, we were interested only in the acute/chronic dichotomy and therefore eliminated such associated features as catatonia and paranoia.

The presence or absence of a postpsychotic regressive state, the nature of the convalescent environment, and the presence or absence of a therapeutic relationship was determined by consensus between two of us (L. K. and S. D. K.); we both had continued contact with each patient during hospitalization. Nursing notes, discharge summary, and progress notes were also used. Strauss-Carpenter outcome scores were compiled independently and were not available until all other data were recorded. The features that define a postpsychotic regressive state are contained in appendix 1.

A convalescent environment was rated as unfavorable if any one of the following features was present: the environment required or promoted the continued helplessness of the patient; the environment did not interdict unnecessary helplessness and passivity; the environment overtly or covertly rejected the patient and increased his or her sense of social estrangement; or the patient lived alone prematurely or in an impersonal environment without an adequate system of external supports (this situation might obtain through life circumstances, as in the case of parent death, through an avoidance of a more clearly pathological environment, or through the patient's overestimation of internal resources). A convalescent environment was rated as favorable if it provided a continuing feeling of safety without hampering individuation; thus, the environment could range from benign, passive, and supportive to more flexible, actively supportive, and accurately empathic. In this conception, a variety of environments could be construed as favorable if the parents, peers, or spouse of the patient provided nonintrusive emotional support through their attitude toward the patient and through sensitively timed interpersonal contact.

A therapeutic relationship was considered to be present if there was a positive emotional engagement by patient and therapist in the context of help-giving. Auxiliary clinical observations of a therapeutic relationship were consistent negative reactions to therapist absences and continuous positive emotional response when the therapist was present. Further support for a therapeutic relationship included voluntary continuation of therapy after discharge, the simple voicing of a good relationship by the patient, and the retrospective evaluation of the patient on follow-up.

RESULTS

The characteristics of the patient sample are presented in table 1. There were 15 chronic schizophrenic patients—5 women and 10 men. The acute schizophrenic population also consisted of 5 women and 10 men. The overrepresentation of men in this sample is not clearly understood; it may simply be an artifact.

TABLE 1
Characteristics of the Schizophrenic Sample

Item	Age	Sex	Phillips Scale Score*	Postpsychotic Regression	Strauss-Carpenter Outcome Score**	Convalescent Environment	Good Therapeutic Relationship
Chronic patients							
1	24	Male	22	Present	13	Alone (favorable)	Absent
2	27	Male	23	Absent	15	With parents (favorable)	Absent
3	22	Male	20	Present	15	Alone (favorable)	Present
4	36	Female	5	Present	14	With husband (unfavorable)	Present
5	20	Male	12	Present	8	Alone (unfavorable)	Absent
6	18	Male	25	Absent	11	With parents (favorable)	Absent
7	24	Female	23	Present	12	Alone (unfavorable)	Present
8	19	Male	20	Absent	8	In a commune (unfavorable)	Absent
9	21	Male	20	Present	8	With parents (unfavorable)	Present
10	21	Male	26	Absent	13	With parents (unfavorable)	Present
11	25	Male	12	Absent	6	Alone (unfavorable)	Absent
12	16	Female	—	Present	14	With a peer (favorable)	Present
13	20	Female	27	Present	6	With parents (unfavorable)	Absent
14	23	Female	14	Present	14	With grandmother (favorable)	Present
15	22	Male	17	Present	16	With parents (favorable)	Present
Acute patients							
16	23	Female	18	Present	5	In hospital (unfavorable)	Present
17	24	Male	9	Present	13	With parents (favorable)	Present
18	22	Female	17	Present	16***	With parents (favorable)	Present
19	29	Female	2	Present	16	With husband (unfavorable)	Present
20	29	Male	12	Absent	14	With wife (favorable)	Present
21	25	Male	8	Present	16	With parents (favorable)	Present
22	21	Male	18	Present	14	With parents (favorable)	Present
23	19	Male	18	Present	13	With parents (favorable)	Present
24	27	Male	11	Present	16	With peers (favorable)	Present
25	19	Male	10	Present	13	With parents (favorable)	Present
26	22	Female	16	Absent	16	With parents (unfavorable)	Present
27	21	Female	11	Absent	14	In residential school (favorable)	Present
28	25	Male	18	Absent	14	With parents (favorable)	Absent
29	20	Male	20	Present	15	With parents (favorable)	Present
30	19	Male	24	Present	13***	With parents (favorable)	Present

*Low scores (below 18) indicate good premorbid adjustment; high scores (18 or above) indicate poor premorbid adjustment.
**A score of 12–16 indicates good outcome; a score below 12 indicates poor outcome.
***All Strauss-Carpenter outcome ratings were made 2 years after hospital discharge except these, which were made 3 years after hospital discharge.

In the larger investigation, initial interviews of 264 patients have yielded an even distribution of men and women.

The premorbid social adjustment score on the Phillips Scale (22) indicated that the acute schizophrenic patients clearly had a better premorbid social adjustment. However, there were 4 chronic schizophrenic patients with a good premorbid social adjustment, and there were 6 acute schizophrenic patients with elevated scale scores. Although low Phillips scores (indicating good premorbid adjustment) were almost invariably associated with good outcome, only half of the poor premorbid scores reflected a poor outcome.

The postpsychotic regressive state was seen in 21 patients, including 11 with acute and 10 with chronic schizophrenia. There were 7 chronic patients with a postpsychotic regression who had good outcomes, whereas 2 out of 5 had a good outcome but did not have a postpsychotic regression. There were 3 chronic patients who had postpsychotic regressions and poor outcomes. Among the acute patients, 10 of 11 who had postpsychotic regressions had good outcomes, whereas 1 had a poor outcome. All 4 acute patients who did not experience a postpsychotic regressive state had good outcomes.

In this retrospective assessment of the postpsychotic regressive state, we found no relationship between the appearance of such a state and 2–3 year outcomes in this sample. However, further analysis of the data showed that the diagnosis, convalescent environment, and therapeutic relationship were all dependable predictors of outcome. The diagnosis of acute and chronic schizophrenia predicted the outcome fairly well. Fourteen of 15 acute schizophrenic patients had good outcomes regardless of their demographic and environmental circumstances (hit rate, 93%). However, among the chronic patients, 6 had poor outcomes and 9 had good outcomes, revealing a comparatively high false alarm rate (60%). The difference between the acute patients' mean score (13.07, SD=2.75) and the

chronic patients' mean score (11.53, SD=3.44) on the Strauss-Carpenter Scale was significant (t=2.05, df=28, p<.05). The biserial correlation computed between the scale scores and the acute versus chronic diagnosis was .45 (p<.05).

Eleven of 30 schizophrenic patients (8 were acute) had poor and 19 had favorable convalescent environments. The mean Strauss-Carpenter Scale score for the group with a favorable convalescent environment (14.6, SD=1.34) was much higher than that of the poor group (10.18, SD=4.12). The group difference was significant (t=3.91, df=28, p<.01). The biserial correlation between the scale scores and the two diagnostic groups was high (.74, p<.01). It was noted that in the chronic schizophrenic patients the outcomes were especially susceptible to the nature of the convalescent environment.

Finally, 22 schizophrenic patients developed a therapeutic relationship with the therapist. All but 1 acute schizophrenic patient had such a relationship; this individual went on to a good outcome. Of the 15 chronic schizophenic patients, 7 had no therapeutic relationship; 5 of these 7 went on to poor outcomes. The difference of the mean Strauss-Carpenter Scale scores between the good (13.64, SD=2.66) and poor (10.13, SD=3.60) therapeutic relationship groups was significant (t=2.91, df=28, p<.01). The biserial correlation was also substantial (.63, p<.01).

DISCUSSION

This study has assessed several variables in relation to outcome in schizophrenia. In previous papers (18, 23), the proper therapeutic management of a postpsychotic regressive state was postulated to be an important determinant for an enduring good outcome. Others have also postulated that the successful resolution of this clinical phenomenon bodes well for longer term outcome (24, 25). However, not all good outcomes studied by others have included such a state. Sachar and associates (26) described a "parasitic" followed by a "compliant" pathway to recovery and, in his review of the treatment of schizophrenia in the Soviet Union, Hein (27) named a hypersthenic remission that has a favorable vocational outcome.

Furthermore, the incidence of the postpsychotic state is not at all clear. Roth (28) considered this "depressed-neurasthenic" phase almost ubiquitous. Bowers and Astrachan (29) found a postpsychotic depression in over half of the 36 consecutive patients they studied. Stern and associates (30) reported 2 profound postpsychotic depressions and 6 moderate depressions in 17 schizophrenic patients in their sample. Finally, Sachar and associates found that "anaclitic depression" followed the disappearance of organized psychosis in all 4 intensively studied schizophrenic patients in one study (31) and 1 in 4 in a second study (26). Interestingly, no medication was used in either of these studies.

Because depression is a variable feature in this state, we prefer the term postpsychotic regressive state. In our study, 70% of 30 schizophrenic patients experienced a pronounced postpsychotic regression; thus, the incidence of this phenomenon is relatively high, ranging from 25% to 70%. It is found across cultures, in a variety of settings, and in different socioeconomic and racial groups; it appears with or without neuroleptic medication.

At this time we cannot make any definitive statements about the association of such a state with an enduring good outcome. We can conclude only that the postpsychotic regressive state is a frequent aftermath of schizophrenic disorganization. The presence of a postpsychotic regression seems to have no relationship to short-term outcome. However, the therapist remains in a clinical quandary when confronted with this phenomenon. This postpsychotic regressive state is resistant to ECT and tricyclic antidepressants (28, 29).

Four of the patients we studied had a postpsychotic regressive state followed by poor outcome. Of the 4, the 3 chronic schizophrenic patients had ego-syntonic regressions in which there was a continuation of overt thought disorder, conspicuous absence of insight into the nature and severity of their illness, and an inability to elicit and/or use the caretaking behaviors of helpgiving persons in the hospital. The 1 acute schizophrenic patient with a poor outcome had undergone a series of catastrophic episodes that preceded her acute schizophrenic episode. Because of this, she was unable to use caretaking behaviors in the hospital. Furthermore, she had a particularly unsatisfactory convalescent environment.

In summary, our findings suggest that there are two forms of the postpsychotic state: one is a true postpsychotic regression, and the other is an ongoing adaptation to a subdued, yet continuing, disorganizing process. In the true postpsychotic regressive state, sensitive caretaking with support of the regression is indicated, as detailed in previous papers (18, 22). Because this state spontaneously reverses, a graduated plan of social and later vocational mobilization can be instituted (23). In the subdued psychotic state, the therapeutic task is stabilization of the disorganizing process followed by an active rehabilitation program that sets realistically limited social and vocational goals. The support of regressive behaviors in this state should not be construed as potentially therapeutic, although it may become necessary in the event that rehabilitative efforts fail.

The diagnosis of acute schizophrenia is a very accurate predictor of good outcome; it predicted good outcome in all but 1 of 15 of our patients. This diagnosis can be made by interview either during or shortly after the psychosis. However, the diagnosis of chronic schizophrenia is a poor predictor of outcome 60% of our patients with this diagnosis had a good outcome, and 40% had a poor outcome.

The convalescent environment has been the subject of much study. Brown and associates (32) found that

former patients living with mothers or wives had higher readmission rates than those living with siblings, distant relatives, or in lodgings. Carstairs (33) found that success in remaining in the community was associated with greater welcome, the presence of a "key person," positive attitudes, and a perception of the patient as not dangerous. In an excellent review of the literature, Kreisman and Joy (34) concluded that a moderate to low level of emotional expressiveness, empathic understanding, and educated attitudes about mental illness are significantly related to good outcome. A composite of a therapeutic convalescent environment contained in their review paper corresponds closely to the favorable convalescent environment in our study.

In this investigation we used a concept of favorable convalescent environment as one that provides a continuing feeling of safety without hampering individuation. The definition provides an assessment in a variety of environments, whether the patient is living with spouse or parents, alone, with friends, or with other relatives. We found that the assessment of a favorable convalescent environment is an excellent predictor of good short-term outcome. This finding was especially prominent among patients diagnosed as having chronic schizophrenia. The finding has important clinical implications because a favorable convalescent environment can often be developed and perpetuated through a variety of clinical interventions.

Finally, we assessed the therapeutic relationship and found that a good therapeutic relationship is clearly associated with good outcome. There are obvious interactions between the presence of a therapeutic relationship and the presence of a good convalescent environment. On the one hand, parents, spouse, other relatives, or friends who compose important aspects of a good convalescent environment are more likely to support psychiatric treatment financially and attitudinally. On the other hand, a good therapeutic relationship can aid in the formation of a more favorable convalescent environment. Another interpretation of this finding is that schizophrenic patients with potentially better interpersonal relationships are more able to form therapeutic relationships; the formation of such a relationship may only be a measure of an intrinsically better outcome. However, many of the schizophrenic patients who developed a therapeutic relationship in this study were initially untrusting or even overtly interpersonally aversive. Therefore, we conclude that the *development* of a good therapeutic relationship appears to contribute to good outcome. Again, this finding is more striking in the chronic schizophrenic patients.

This study has focused on several aspects of the schizophrenic illness that may influence outcome. The postpsychotic regressive state, the nature of the convalescent environment, and the therapeutic relationship are all factors in which clinical intervention is possible. In this study, the latter two features were shown to clearly relate to good outcome. It is hoped that further studies will be directed to factors in the schizophrenic illness that may lead to beneficial modification.

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APPENDIX 1
Characteristics of the Postpsychotic Regressive State

1. Abatement of the psychosis with some continuing internal disorganization.
2. Anergia and neurasthenia with behavioral quietude.
3. Early reversal of diurnal rhythm with excessive sleeping during the day. Later, falling asleep early in the evening and sleeping late in the morning. Afternoon napping common.
4. Early, may be food aversion with anorexia. Later, excessive food consumption, often with gorging and pronounced weight gain.
5. Staring and/or dysrhythmic eye blinking.
6. Thought clogging or thought scattering.
7. Desire to be alone.
8. Profound passivity.
9. Feelings of emptiness, aloneness, and unlovability.
10. Depression or total affective blockade.
11. Dyadic preoccupation.
12. Psychophysiological disturbances.
13. Transient exacerbations of disorganization in some patients, precipitated by specific stresses, such as separation from valued objects or firm expectations of independent functioning.

Strategies and Risks in Psychotherapy with Bilingual Patients: The Phenomenon of Language Independence

BY LUIS R. MARCOS, M.D., AND MURRAY ALPERT, PH.D.

The presence of two separate languages, each with its own lexical, syntactic, semantic, and ideational components, can complicate psychotherapy with proficient bilingual patients. If only one language is used in therapy, some aspects of the patient's emotional experience may be unavailable to treatment; if both languages are used, the patient may use language switching as a form of resistance to affectively charged material. The authors suggest that monolingual therapists should carefully assess the degree of language independence in bilinguals in order to minimize its impact on therapy. They conclude that study of bilingual patients may provide important insights into the nature of the therapeutic process.

BILINGUAL PATIENTS comprise an important proportion of the psychiatric population in many urban areas of this country. Although there is an abundant literature on bilingualism, its effects on the processes of psychotherapy have received limited attention.

Despite divergent views on many issues, writers on bilingualism concur that it has a major effect on personality formation and integration. While powerful sociolinguistic variables (e.g., migration, acculturation, and biculturalism) frequently covary with bilingualism and are well known for their tangible impact on the individual (1), the presence of two language systems that appear to be insulated from each other constitutes bilinguals' sui generis characteristic and is a fundamental factor affecting their lives. Understanding this impact requires appreciation of the phenomenon of language independence, that is, the bilingual's capacity to acquire and maintain two separate language codes—each with its own lexical, syntactic, phonetic, and ideational components—and to use them independently with minimal interaction. The bilingual operates parallel encoding mechanisms, each with its own stream of associations between message words and events in the ideational system. For example, for an English-Spanish bilingual the word *dog* will be linked to a certain stream of associations, connotative meanings, and idiosyncratic emotional experiences. For the same individual, the translation equivalent *perro* may well be identical in central denotative meaning; however, the associations, metaphorical extensions, and affective accompaniment may differ significantly.

The purpose of this paper is to examine the evidence for the phenomenon of language independence in bilinguals and to consider its functions and possible ways of operating during psychotherapy. Since verbal interaction is the instrument of psychotherapy, the existence of two evidently independent systems of language may be expected to modify fundamental aspects of the treatment process. The issues to be considered are especially relevant to dynamic psychotherapies that nurture self-knowledge, catharsis, and experiential insight.

The phenomenon of language independence is primarily applicable to proficient bilinguals, i.e., individuals who display native proficiency in each language, with minimal interference in speech production in either. Contrasted with the proficient bilingual is the subordinate bilingual, who shows a differential competence in two languages and uses translation equivalents when speaking in the second language. These individuals appear to possess a unitary semantic and ideational language structure (2). The implications for clinical psychiatry of this second group are different and have been the topic of previous reports (3–6). It is also important to distinguish between bilinguals who learned both languages in the same cultural context (compound bilinguals) from those whose languages had different acquisition contexts (coordinate bilinguals) (7, 8). Separation of language-acquisition contexts appears to enhance the functional independence of a bilingual's two languages (9–11).

EVIDENCE FOR LANGUAGE INDEPENDENCE

Aphasia

Compelling evidence for language independence comes from neurological studies of aphasia in bilinguals. Following cerebrovascular accidents or during deteriorating chronic organic brain syndromes, bilingual individuals exhibit differential impairment of their two languages (12–15). Recently a similar effect has

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been reported in bilingual psychiatric patients after electroconvulsive therapy (16). Interpretations of these clinical observations vary and implicate a number of variables such as age at language acquisition, frequency of usage, and emotional attachment to the language. Most authors agree that the encoding and decoding mechanisms associated with a primary language have greater resistance to language pathology than do those associated with a secondary language. Neurologists have also formulated a theory of bilingualism (17, 18) and have hypothesized an anatomically localized language-switching control center in bilinguals. This hypothesis, if confirmed, may some day help us to understand individual differences among bilinguals with respect to the degree of language independence.

Psycholinguistics

Psycholinguistic investigators have repeatedly demonstrated empirically that bilingual subjects verbalize different associations in response to semantically identical words, according to the language in which the task is performed (19–22). In general, these studies suggest that words referring to concrete, high-imagery objects elicit more similar responses in the bilingual's two languages than do abstract words, which in turn tend to evoke more similar associations than words referring to feelings (23). Thus, for an English-Spanish proficient bilingual the words *table* and *mesa* may generate approximately the same mental representations; *freedom* and *libertad* will arouse different ones; and the words *love* and *amor* will mean and "feel" quite different. Ervin obtained strikingly different responses to the Thematic Apperception Test according to the language in which bilingual subjects were tested (24). The individuals participating were native speakers of French who were living in the United States and who spoke English fluently. Erwin found language-specific variations in the stories told and in the emotions expressed by these subjects. It appears that perception of role, recall, and projection of past experiences—three crucial aspects of the psychotherapeutic process—are affected by the language of report.

Findling studied the characterological traits "need affiliation" and "future orientation" in a group of English-Spanish bilinguals (25). Need affiliation was defined as the individual's concern over establishing, maintaining, and restoring positive relationships with others; future orientation, as the extent to which a person's preoccupation with events that may or may not happen precludes concern with events that have already taken place. The results demonstrated a language effect; both traits were significantly stronger when the subjects spoke English.

The Ervin and Findling studies (24, 25) permit one to infer that some proficient bilinguals have two linguistically confined personality structures. We will now examine the implications of this phenomenon for the process of psychotherapy.

IMPLICATIONS FOR PSYCHOTHERAPY

Although there is no evidence that monolingual psychotherapists are less effective in treating the bilingual patient, we know of no systematic study of this issue or of the effectiveness of treatment in the mother tongue compared with treatment in the second language that the patient acquired in youth, adolescence, or adulthood. However, the nature of the language independence phenomenon in itself, as well as the clinical material reported, suggests that a therapist who matches the bilingualism of the patient has special resources at his disposal. One purpose of this paper is to stimulate further discussion of this issue. We will consider the problems and opportunities specific to the psychotherapy of proficient bilinguals.

Unavailability

Unavailability refers to the presence of areas of the bilingual's intrapsychic world that remain hidden and unexplored due to the fact that they are independent of the language system in which the treatment is conducted. Because these areas are out of the therapist's reach, they cannot be part of the working material. The psychoanalytic literature reveals a number of examples illustrating this effect (26–31). Buxbaum (28) described the psychoanalysis of two German women who emigrated to the U.S. in adolescence. Both spoke German and English fluently, but English was the treatment language. One patient suffered from a severe preoccupation with the penis. During the course of treatment she frequently associated about the word *sausages*, but no therapeutic consequences resulted. Translation of that word into its German equivalent, *Blutwurst*, released from repression a series of memories that helped to uncover fundamental sexual material from her infantile years. Although the other patient had dreamed repeatedly in the course of treatment about *windows*, she gave no association to them; when the word was translated into the German *Fenster*, she verbalized a chain of relevant associations. Buxbaum concluded that, for these two bilingual patients, speaking in English meant avoiding the language of their key fantasies and memories, enabling them to detach themselves from significant psychic traumata.

Greenson (29) described the psychoanalytic treatment of a bilingual woman whose languages were German and English. Although the patient had used both languages during the first part of her treatment, she reached a point at which she totally refused to speak in German, claiming "I have the feeling that talking in German I shall have to remember something I wanted to forget." She was also afraid of saying obscene words in German; she felt that "they were much easier to say and much cleaner in English." Furthermore, the patient described herself differently in each language: "in German I am a scared dirty child, in English I am a nervous refined woman." From this experience, Greenson inferred that for this patient German was a pregenital tongue and the bearer of important unre-

solved conflicts. English, on the other hand, offered the patient an opportunity to build up a defensive system against her infantile life. The use of German during therapy was a technique designed to break through the strong defenses that isolated old structures from newer ones, which made possible the final resolution of the patient's neurosis.

Unavailability need not be an all-or-none phenomenon, and the consequences of relative unaccessibility of material will depend on the relevance of lacunae for particular treatment goals. It is reasonable to suppose, however, that if the lacunae are extensive or crucially placed the treatment may be incomplete or unsuccessful. Although unavailability may affect historical events, thoughts, images, and other levels of the personality structure, it will probably affect most often the integration of affective reactions to specific events and the freedom and direction of associational pathways.

Splitting

An alternate expression of unavailability may be deflection of the emotional component of a verbalized idea or experience. For example, the patient may report emotionally provocative material without expressing the expected concomitant affect. Krapf (30), in a clinical report about the choice of language in polyglot psychoanalysis, described the treatment of an English-Spanish bilingual who suffered from voyeurism. Although the treatment was conducted mostly in English, the patient spoke Spanish whenever he talked about his sexual activities. It became evident that this highly anxiety-provoking material could only be verbalized in Spanish because overwhelming anxiety accompanied its verbalization in English. Similarly, in a recent discussion of the defensive aspects of patients' lying during psychotherapy, Marcos (32) reported the case of a bilingual patient who, for more than one year, lied about fundamental aspects of her personality. The patient's languages were English and Spanish, but she always preferred to speak in English. As she began to speak Spanish her defensive lying became apparent, and an increase in her anxiety level took place. Marcos concluded that this patient chose the language that was less likely to provoke anxiety and, conversely, more likely to protect the ego against anxiety caused by the superego. Finally, Lukianowicz (33) studied the phenomenon of bilingual auditory hallucinations in polyglot psychiatric patients. His conclusions indicated that psychotic bilingual patients most often hear aggressive and threatening voices in their second language, whereas the "good" and protective voices use their native tongue. He suggested that this phenomenon represents a psychological defense mechanism that allows the hallucinating patient to dismiss his aggressive voices by "refusing to understand them."

The problems of unavailability and splitting may be reduced if the psychotherapist is careful to estimate the potential for noncongruence of the two language systems. Factors that should be routinely explored include the age and developmental stage of the patient when the languages were acquired, experiential sorting of language contexts and nature of the object relationships associated with them, and attitudes and values connected with each language. The therapist ought to explore and look for aspects that are shared by the two languages as well as events that seem unique to either one. This language evaluation will permit the therapist to assess the degree of language independence and to anticipate areas that may be unavailable in a particular language (34). Furthermore, once these factors have been identified, the therapist will be in a position to consider possible consequences of language independence in regard to the patient's specific treatment goals, as well as to plan therapeutic strategies to minimize the effects of this linguistic phenomenon.

Resistance and Facilitation

When the patient and the psychotherapist are matched bilinguals and the treatment is open to the use of either language, the patient's choice of language and the points of language switching become relevant to the psychotherapeutic process. Language switching may have either inhibitory or facilitatory effects, but it mainly offers the bilingual opportunities for resistance denied to the monolingual patient. If verbalizing experiences in the language in which they occurred renders them more real, the patient may choose to speak in the more abstract detached language to avoid anxiety. Although this capacity to modulate the emotional impact of associational material might on occasion be useful (e.g., when the superego concomitant with one of the languages is so strict that the patient may constructively choose to approach conflicting material through the less punitive language system), for the most part free use of language switching makes the course of treatment especially vulnerable to repression, compartmentalization, and denial. Until these issues are well in hand it might not be advisable to exploit the use of language switching as a therapeutic facilitator.

Technically, language choice and switching should be used by the therapist to explore areas of the bilingual patient's personality that are language specific. At a more theoretical level, however, language switching may be utilized strategically according to specific diagnostic features of the patient. For instance, it may be advisable to encourage an obsessive patient who uses constant intellectualization and avoidance to verbalize in his first, more emotionally charged, language. Conversely, a hysterical patient whose intense affect interferes with attempts at objectifying issues may benefit from encoding experiences in the second, less emotional, language.

CONCLUSIONS

We have summarized the evidence supporting the existence and delimiting the characteristics of lan-

guage independence in proficient bilinguals. This phenomenon has such practical importance for the psychotherapy of bilinguals that the prognosis for successful outcome may depend upon the language of treatment and the strategic handling of the two-language system. Therapists treating bilingual patients are confronted with special consequences of the language independence phenomenon. Unavailability of relevant material and splitting or lack of integration of associations and affects may give rise to misconceptions about the patient. When the treatment is conducted by a matched bilingual therapist, language switching strategies offer special technical resources, with theoretical implications for the treatment of different diagnostic categories of bilinguals. When the therapist is monolingual, language independence will still affect the treatment process; we have suggested language assessment methods to help the therapist minimize the obstructing effects of this phenomenon.

Study of bilingual patients may provide unique opportunities for gaining insight into therapeutic processes. Thus the language independence phenomenon may permit us to distinguish motivated repression from information retrieval failures due to encoding process factors. Furthermore, since proficient bilinguals may be conceived of as having duplex symbolic representation, they offer special possibilities for the study of relations among language acquisition, symbol formation, encoding mechanisms, and other cognitive processes currently thought to be essential to our understanding of psychotherapy.

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Social Rehabilitation of Separation-Induced Depressive Disorders in Monkeys

BY STEPHEN J. SUOMI, PH.D., ROBERTA DELIZIO, AND HARRY F. HARLOW, PH.D.

The authors studied a group of four monkeys reared together, repeatedly separated from each other, and then exposed to another group of four monkeys reared in surrogate-peer groups who acted as therapists. The study group was compared with the therapist monkeys, a group exposed to the same separations but not to the therapist monkeys, a control group that experienced no separations, and two additional groups of stimulus animals. The authors' findings indicate that monkeys showing depressive behaviors after repeated separations can be returned to age-appropriate social performance through repeated exposure to socially active age-mates.

DURING THE PAST DECADE, numerous researchers working at several different laboratories have produced and studied depressive-like behavior in nonhuman primates. The rationale underlying this research has been twofold. First, our knowledge concerning depression is limited, and the ethical and practical constraints on research directly involving human patients are considerable; therefore, animal models of the disorder are sorely needed. Primates are probably the most appropriate subjects for such animal models (1, 2). Second, it is commonly assumed that "normal" behavior can be better understood when viewed in the context of abnormal behavior, particularly when the latter's origin is known. Consequently, several investigators have studied experimentally induced psychopathology in monkeys in order to understand more fully the process of normative socialization (3).

Most of the primate research involving induced depressive phenomena has used rhesus monkeys and other macaques in studies of mother-infant separation. This work has been based in part on the reports by Spitz (4), Bowlby (5), and others of human anaclitic depression resulting from infant separation from the mother. Several investigators (6–8) have successfully produced similar depressive behaviors, i.e., protest-despair reactions, in young monkeys by separating them from their mothers for prolonged periods of time. However, the monkey mother-infant separation paradigm has several major drawbacks as a general model for human depression. First, anaclitic depression is usually limited to infants, but mother-infant separation is hardly the primary cause of most adult human depressions. Second, recent research (9) has indicated that there is great variability in the response of infant monkeys to separation from the mother, just as there is for human infants; therefore, the procedure is not a reliable way to produce a population of depressed simian subjects.

An effective alternative procedure for production of monkey psychopathology involves peer separation. When performed under appropriate conditions, peer separations produce clear-cut depressive-like behaviors more consistently across a wider age range of subjects than do maternal separations (10). Further, the procedure is more flexible. It can be repeated a number of times on the same subjects, yielding depressive reactions in each case, and it requires fewer caretaking personnel. Peer separation is therefore more amenable to experimental manipulation than is maternal separation—at least in macaque subjects. Consequently, several recent studies of monkey psychopathology have employed peer separations to precipitate the desired disorders.

For example, Suomi and associates (11) reared infant monkeys without their mothers in groups of four from birth. From 3 to 9 months of age the infants were subjected to a series of 20 repetitive, short-term peer separations, each of 4 days' duration. The monkeys responded to each separation with protest-despair reactions, initially showing high levels of vocalizations and hyperactivity, which soon changed to depressive behaviors such as self-clasping, huddling, passivity, and social withdrawal. The monkeys did not adapt to the separations; the reactions they exhibited in the final separations were as pronounced as those exhibited during the first separations. Further, they developed maturational arrest as a cumulative reaction to the separation procedure. The basic manipulations of Suomi

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and associates' study have been replicated a number of times, and the results have generally been consistent with the original findings. This technique can therefore be considered to be a reliable procedure for production of depressive-like phenomena in young nonhuman primates.

Once a satisfactory standard technique for production of a given form of psychopathology has been developed, it can then be employed to test the efficacy of specific therapeutic procedures. This stage has been reached with respect to monkey depressive behavior produced by peer separation. Consequently, during the past 2 years several researches designed to reverse such monkey disorders have been initiated at the Wisconsin Primate Laboratory. Some of these studies have used human antidepressant drugs such as imipramine (12), and others have used ECT (13). The data we will present in this report deal with a third approach—that of using other monkeys as "therapists" for our depressed subjects.

Conspecific therapists have been previously used to reverse other laboratory-induced psychopathologies in monkey subjects. For example, we demonstrated that the total isolation syndrome, i.e., psychopathology produced by rearing monkeys in social isolation for at least the first 6 months of life, can be almost completely eliminated by exposing the isolates to 3-month-old socially normal monkey "therapists" (14, 15). These therapists are effective because the behaviors they exhibit at 3 months—excessive social clinging, primitive play, and absence of aggression—are precisely the social stimuli that monkeys raised in social isolation need to overcome their social learning deficits.

It has always been our position that choice of a particular therapist should be entirely dependent on the behavioral dysfunction shown by the "patient" monkey. A total isolate monkey typically exhibits excessive self-directed stereotypy and an absence of even the most primitive social interchange. A normal 3-month-old monkey will readily cling to such an isolate, making it impossible for the isolate to engage in most self-directed behaviors. At the same time the younger animal can "teach" the isolate that social contact is comforting and desirable rather than frightening and otherwise noxious. The isolate is then amenable to development of an acceptable social repertoire parallel to the ongoing normal development of its therapist.

However, monkey depression represents a syndrome quite different from that of the social isolate. Most separated monkeys predominantly display inactivity and social withdrawal; the social behaviors that they do exhibit tend to be infantile and basically passive in nature. Thus a 3-month-old monkey who clings and is socially naïve would not necessarily be the most appropriate individual to elicit socially normal behavior. Instead, we reasoned that a stimulus monkey who could actively entice, even force, a separated subject out of its depressive social withdrawal would most likely be effective as a therapist. This proposition was tested in the following study.

METHOD

The general design of the study is outlined in tables 1 and 2. An experimental group of four rhesus monkey infants who had been reared together from birth were subjected to repeated peer separations in order to develop depressive behavior patterns (pretherapy phase). During a second series of repetitive separations they were exposed to the therapists, socially active stimulus animals equivalent in age to the experimental subjects (therapy phase). Later, they were subjected to a third series of peer separations, without interaction with the therapists (posttherapy phase). Finally, they were returned to interaction sessions with the therapists and were also exposed to two other groups of stimulus monkeys (subsequent interactions phase).

The experimental subjects were four rhesus monkeys (*Macaca mulatta*), two males and two females, who had been separated at birth from their mothers and reared as a group in a 6×4×6-ft pen for their first 3 months of life. Observational data were collected 5 days a week on each subject, beginning at 1 month of age. As in previous studies, these data consisted of durations of behaviors falling into 13 predefined categories, definitions of which are presented in appendix 1, recorded during the 7.5-minute period of each observational session.

Observational data were similarly recorded 5 days each week for the therapist stimulus animals. These were two male and two female monkeys comparable in age with the experimental subjects. However, they had been surrogate-peer reared (with inanimate cloth surrogate mothers and daily access to normal peers), a procedure previously shown to produce more socially active monkeys than the group-rearing procedure experienced by the experimental subjects (16).

Because of the form of the data collection, it was possible to compare data recorded for the subject and therapist monkeys during the pretherapy and therapy periods of the study with previously published data from two other groups of four monkeys (11, 17). Members of the first group (separation group) were reared in a manner identical to that of the experimental subjects and were subjected to the same separation schedule but were not exposed to any therapists (11). The other monkeys provided a nonseparated control group; they had been reared in a group but had not been subjected to separations of any form during their first year of life (17).

In the final phase of the study, both subject and therapist monkeys were exposed to two other groups of stimulus monkeys. The first consisted of four monkeys reared for the first 12 months of life in total social isolation and given chronic diazepam (Valium) treatment. Previous testing had shown these isolated monkeys to be socially inept. The other group of stimulus animals was composed of monkeys who had been reared from birth in nuclear families (for a complete description of the rearing environment see Harlow [18]). Previous

TABLE 1
Outline of Pretherapy and Therapy Phases of Study

Study Group	Pretherapy Phase			Therapy Phase
	Ages 0–3 Months	Ages 3–6 Months	Ages 6–7½ Months	Ages 7½–9 Months
Subjects	Peer rearing	Twelve 4-day separations	Peer housing	Eight 4-day separations; interactions with therapists
Therapists	Surrogate-peer rearing	Surrogate-peer rearing	Surrogate-peer housing	Surrogate-peer housing; interactions with subjects
Separated group	Peer rearing	Twelve 4-day separations	Peer housing	Eight 4-day separations
Control group	Peer rearing	Peer housing	Peer housing	Peer housing

TABLE 2
Outline of Posttherapy and Subsequent Interactions Phases of Study

Study Group	Posttherapy Phase		Subsequent Interactions Phase			
	Ages 9½–12 Months	Ages 13–14 Months	Ages 15–17 Months	Ages 18–20 Months	Ages 21–22 Months	Age 23 Months
Subjects	Peer housing	Eight 4-day separations	Quadrant housing	Daily interactions with therapists and family group	Interactions with therapists, isolates, and family group	Interactions with therapists and family group
Therapists	Surrogate-peer housing	Surrogate-peer housing	Surrogate-peer housing	Daily interactions with subjects and family group	Interactions with subjects, isolates, and family group	Interactions with subjects and family group
Isolates	Postisolation social testing	Postisolation social testing	Postisolation social testing	Postisolation social testing	Interactions with subjects and therapists	—
Family group	Nuclear-family rearing	Nuclear-family rearing	Pen housing	Pen housing	Pen housing	Interactions with subjects and therapists

work had demonstrated that monkeys reared in nuclear families were probably the most socially sophisticated monkeys living in the laboratory (19, 20).

Data for the interaction sessions were collected in the same manner as described above. All of the data analyses to be discussed here involved repeated-measures analyses of variance of category means calculated for each subject over the specific time periods under question. When appropriate, the analyses were followed by Duncan tests between selected mean scores.[1] Statistical significance was defined as $p<.05$.

RESULTS

Pretherapy Phase

When the mean age of the group of experimental monkeys reached 90 days, a separation procedure identical to that used by Suomi and associates (11) was initiated. Each subject monkey was removed from the group pen and housed individually in a 2.5×2×2.5-ft cage, where it could see and hear but not contact other monkeys, for a 4-day period. After 3 days of reunion, a second 4-day separation was imposed, and after a second 3-day reunion, a third separation was imposed. This procedure continued until the subject monkeys had completed 12 separations and reunions.

The reactions of these monkeys to the separation series were quite consistent with those recorded in previous studies of repetitive peer separation. They responded to each separation with protest-despair reactions, and, as can be seen in figures 1–4, by 6 months of age they showed higher levels of ventral cling and self-clasp and lower levels of locomotion and play and sex than nonseparated control monkeys (17). Their behavioral levels were comparable with those of the separated subjects in Suomi and associates' study (11). Thus the data indicated that before therapy subject monkeys were as depressed as subjects in previous definitive studies of monkey depression.

Therapy Phase

In keeping with the separation procedure of Suomi and associates' study (11), subject monkeys, beginning at 7 months of age, were subjected to a second

[1]Complete results of all statistical analyses can be obtained from the authors on request.

FIGURE 1
Duration of Self-Clasp of Four Groups of Monkeys, in Mean Number of Seconds Per Observation Session

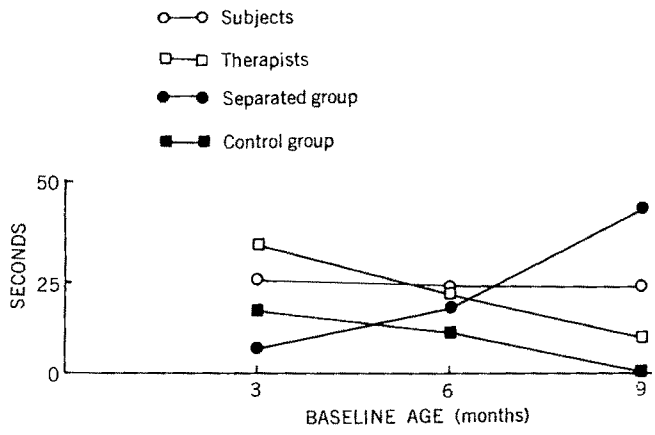
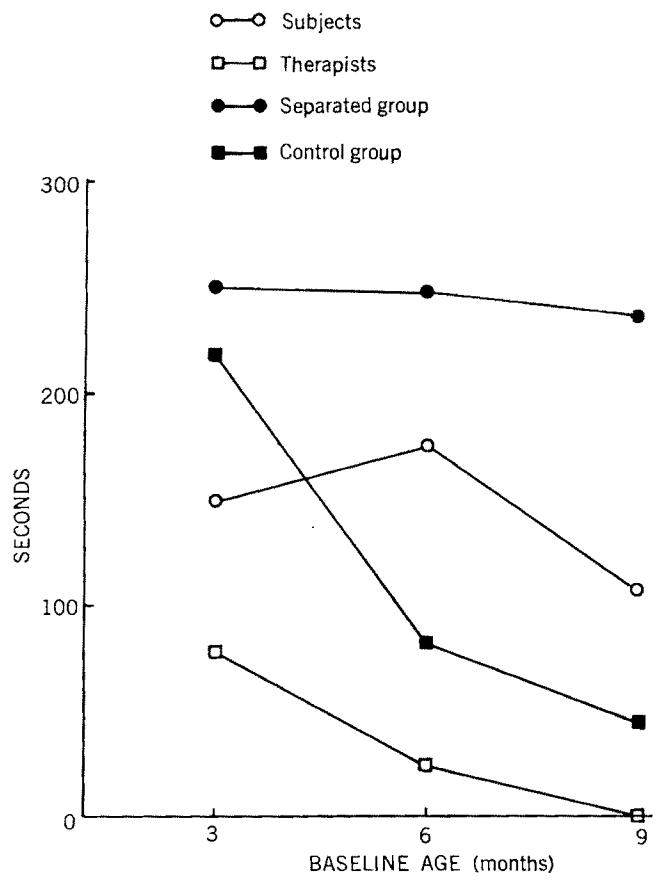
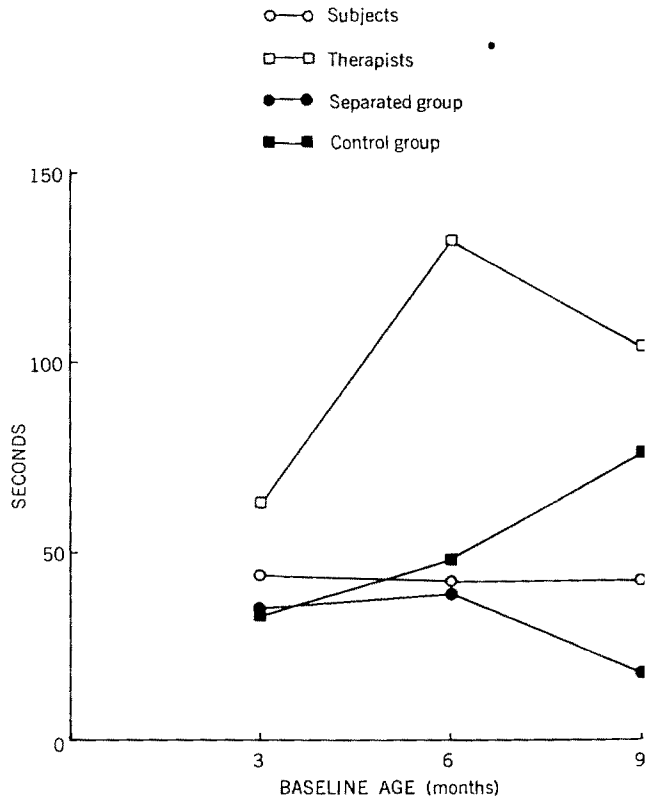


FIGURE 2
Duration of Ventral Cling of Four Groups of Monkeys, in Mean Number of Seconds Per Observation Session



series of weekly 4-day separations and 3-day reunions. Unlike the previous study, however, subject monkeys were exposed to the therapist stimulus animals as pairs (one subject with one therapist) for two 1-hour sessions during each separation and for two 1-hour sessions during each reunion period. As can be seen in fig-

FIGURE 3
Duration of Locomotion of Four Groups of Monkeys, in Mean Numbe of Seconds Per Observation Session



ures 1–4, therapist monkeys at 3 and 6 months were socially superior to subject monkeys as well as to separated and control monkeys of comparable age. Therapist monkeys showed significantly higher levels of locomotion and play and sex and lower levels of ventral cling.

Despite these baseline behavioral differences, during the first 2 weeks of interaction sessions the therapist animals initiated few social exchanges with subject monkeys. Because we thought such exchanges were important for improving the latter's social repertoires we changed the format for the interaction sessions, hoping to stimulate the social performance of the therapist monkeys. The sessions were moved from the subject monkeys' group cage to the therapist animals' home cages, they were increased in frequency to one a day, and they paired two therapist monkeys with each subject, instead of the one therapist monkey in the previous sessions. In all, the subject monkeys were subjected to 8 separations and reunions in this phase of the study, and during each separation and reunion they were exposed to the therapist animals.

The therapeutic effects of even the modified interaction sessions were mild at best. The subject monkeys' behavior during both separation and reunion periods improved slightly as the therapy interactions progressed. By the end of the separation series subject monkeys were exhibiting significantly lower levels o

FIGURE 4
Duration of Play and Sex of Four Groups of Monkeys, in Mean Number of Seconds Per Observation Session

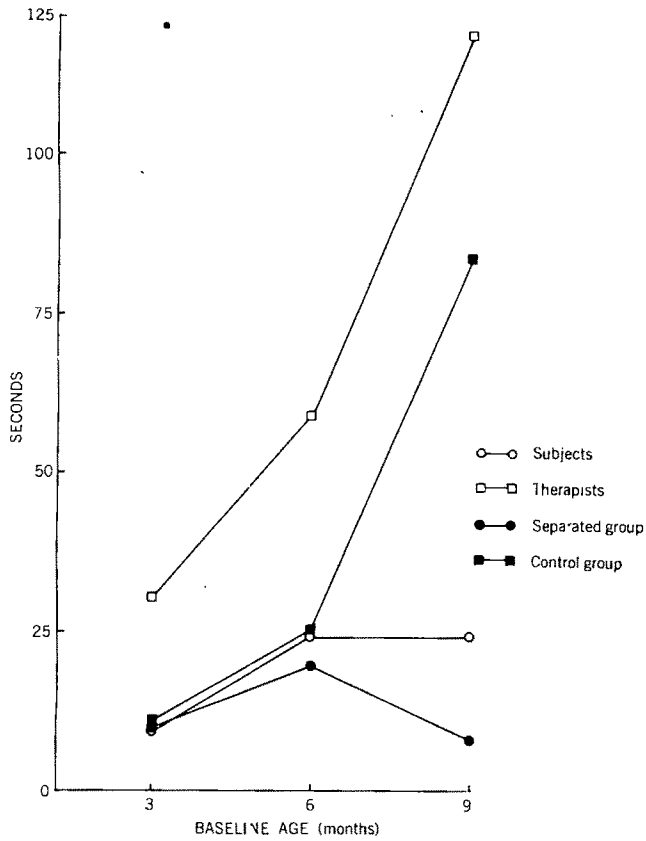
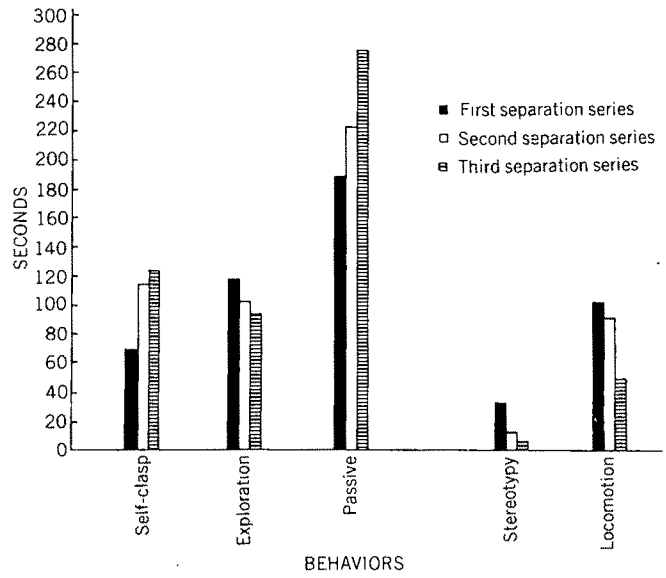


FIGURE 5
Duration of Various Behaviors of Subject Monkeys Averaged for Each Separation Series, in Mean Number of Seconds Per Observation Session



self-mouth, self-clasp, and ventral cling and higher levels of locomotion and play and sex than the separated monkeys, who had not had the benefit of therapy interactions. However, as is evident in the 9-month levels of figures 1–4, the subject monkeys were not socially equivalent to like-age monkeys who had not been separated. They showed higher levels of ventral cling and lower levels of locomotion and play and sex than the control monkeys and their own therapist animals.

Posttherapy Phase

In order to further assess any effects the above interactions may have had, the subject monkeys were subjected to a third series of separations from each other, beginning when their mean age was 12 months. A total of 8 weekly 4-day peer separations and reunions ensued. During this phase they were not permitted to interact with the therapist monkeys or with any other stimulus animals.

Figure 5 shows the mean levels for several behavioral categories during the third separation series along with comparable levels obtained from the first and second separation series. As can be seen in the figure, the experimental subjects actually deteriorated in the third separation series. These subjects showed significantly higher levels of passive behavior and lower levels of locomotion than during previous separations. Clearly, the experimental subjects remained debilitated by social separations.

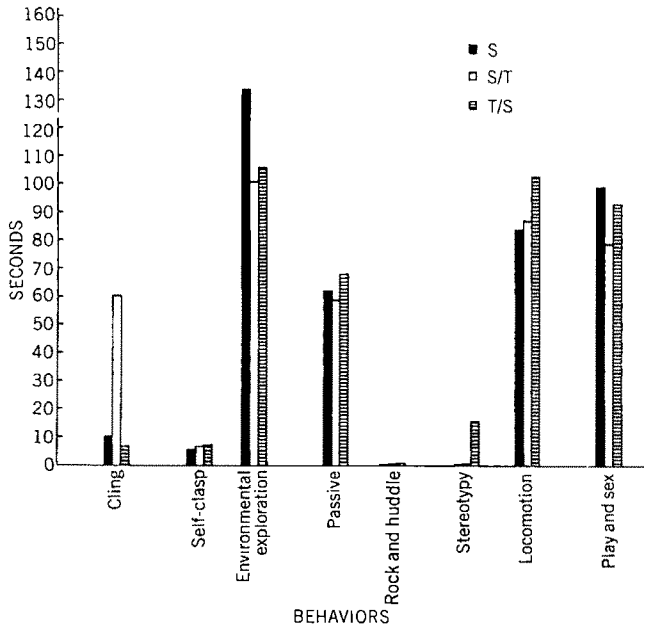
Subsequent Interaction Sessions

In view of the subject monkeys' reactions to the third separation series, it was decided to initiate new interaction sessions with monkeys outside of their living group. At 14 months of age they were moved to a new group cage. Interaction sessions were run once a week in the subject monkeys' home cage, twice a week in their original group pen, and twice a week in a 12×10×8-ft social playroom in order to vary the physical surroundings to which the monkeys were exposed. At 17 months they were reintroduced to the therapist stimulus animals. Thereafter, as a group they interacted with all four therapist monkeys 1 hour a day 5 days a week for 12 consecutive weeks.

Levels of the subject group's behaviors during the interaction sessions were compared with those of the therapist monkeys during the same interactions and with the levels of their behaviors when interacting with each other. These results are summarized in figure 6. The analyses of variance revealed few significant differences between groups or types of interaction sessions. When interacting with therapist monkeys, the experimental subjects exhibited excessive ventral cling and relatively low levels of exploration and locomotion. Otherwise, however, they showed marked improvement over previously exhibited levels of most behaviors. Unfortunately, precise comparative data from the separated monkeys and the control monkeys were not available.

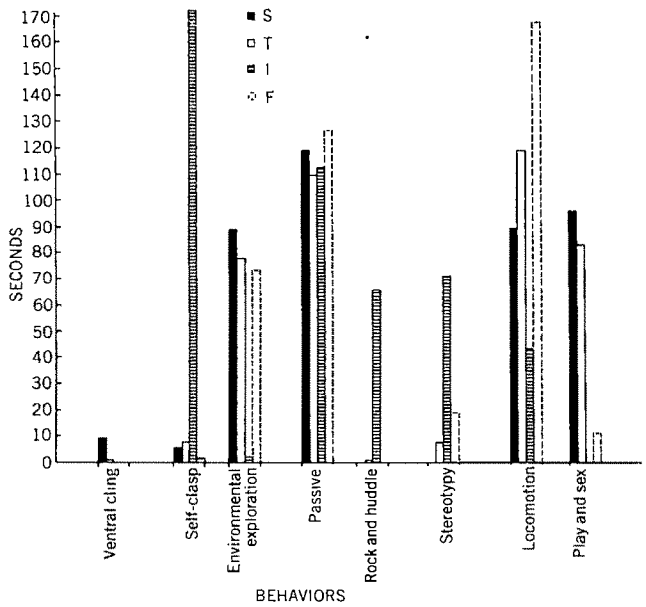
In order to test the generality of these improvements

FIGURE 6
Comparison of Duration of Various Behaviors of Three Groups of Monkeys Following Three Separation Series, in Mean Number of Seconds Per Observation Session*



*S=subjects interacting with each other; S/T=subjects interacting with therapists; and T/S=therapists interacting with subjects.

FIGURE 7
Comparison of Duration of Various Behaviors During Mixed Playroom Session, in Mean Number of Seconds Per Observation Session*



*S=average for subjects with therapists, isolates, and family group; T=average for therapists with subjects, isolates, and family group; I=average for isolates with subjects and therapists; and F=average for family group with subjects and therapists.

in social activity, the subject monkeys were subsequently tested with two additional groups of similar-aged stimulus animals. First, beginning at 18 months of age, they were exposed to the group of isolated animals. The therapist monkeys were also exposed to the isolates. In 8 weeks of 1-hour playroom testing 4 days a week, isolated monkeys showed excessive self-clasp, rock and huddle, and stereotypy, minimal locomotion and exploration, and no play and sex. As in the previous interaction sessions, the subject monkeys exhibited levels of behavior comparable with those of the therapist group. These results are summarized in figure 7.

Finally, both the subject monkeys and members of the therapist group were exposed to the animals reared in nuclear families. The interactions took place in the social playroom in 1-hour sessions 2 days a week for both subject and therapist groups, for a total of 3 weeks. Some of the results of these interactions are also presented in figure 7. The formal analyses indicated that for levels of most behaviors the three groups of monkeys were statistically indistinguishable. Clearly, by 23 months of age the experimental subjects had achieved considerable recovery from the effects of the previous separations.

DISCUSSION

The present data indicate that monkeys exhibiting depressive behaviors following repetitive peer separations can be returned to age-appropriate social performance through repeated exposure to socially active age-mates. Of course, we do not claim that this procedure is the only way to alter depressive psychopathology in monkeys. It is entirely possible that certain antidepressant drugs or ECT could be equally or even more effective and/or more rapid in their mode of action. Current research at our laboratory suggests that this may indeed by the case (12, 13). We are not even convinced that the present research represents the most effective use of monkey peers as therapists. Given our choice, we would have rerun the study using more actively playful stimuls animals, perhaps 1–2 months older than those employed, and we would have increased the duration of the initial interaction sessions by at least three times that used in the present study. Clearly, we do not feel the procedure was optimal—only that it eventually worked.

We believe that the value of such research lies not only in the possible application of the therapy procedure itself, but also in the light it can shed on various monkey models of depression and other psychopathology. The development of techniques that reverse any disorder invariably adds to the overall understanding of the nature of that disorder. We plan to continue our researches using specific monkeys as therapists for disturbed subjects in order to answer the following questions:

Do procedures that reverse depressive reactions to

peer separation also reverse depressive behaviors produced by other manipulations, e.g., vertical chamber confinement or injection of pharmacological agents such as reserpine (21)? How do alternative somatic therapies such as imipramine or ECT compare with social approaches in terms of speed of reversal, presence of side effects, duration of treatment, and prevention of future occurrences of the disorder? Finally, can more effective therapeutic techniques be developed if one uses combinations of both social and somatic approaches? We feel that answers to such questions will greatly further our understanding of monkey depressive disorders. It is our hope that they will add to the understanding of human problems of mental health as well.

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APPENDIX 1
Operational Definitions of Behavioral Categories

Ventral cling: contact of own ventral body surface with another object.

Self-clasp: clasping of any part of own body with hand(s) and/or foot (feet).

Self-mouth: oral contact with own body.

Environmental exploration: tactual and/or oral manipulation by subject of inanimate objects.

Rock and huddle: huddle accompanied by stereotypic rocking.

Aggression: vigorous and/or prolonged biting, hair pulling, and/or clasping, accompanied by one or more of threat, barking, piloerection, or strutting.

Passive: absence of all social, exploratory, and locomotor activity.

Stereotypy: identical movements maintained in a rhythmic and repetitive fashion for at least three cycles (scored independently and noninclusive of locomotion).

Locomotion: any self-induced change in location of subject.

Social contact: contact and/or proximity (within 2 in) with another subject.

Play and sex: any sexual advances or posturing directed toward another subject and/or any type of play activity (including contact and noncontact play).

Vocalization: any sound emitted by subject.

Huddle: self-enclosed, fetal-like position.

Patient Privacy and Confidentiality at Mental Health Centers

BY JOHN O. NOLL, PH.D., AND MARK J. HANLON, M.A.

The authors studied potential violations by mental health centers of individuals' rights to privacy and confidentiality by sending questionnaires to state directors of mental health programs and to mental health centers in all of the 50 United States and its territories. The questionnaires assessed the extent to which information that could identify a patient is reported to state offices; it also addressed issues of mental health center discretion in reporting information, patient consent to reporting information, the life span of patient files, and the access of outside agencies to mental health center files. The authors conclude that legislative action prohibiting the reporting of identifying information appears desirable.

THE ISSUE OF CONFIDENTIALITY is considered in the ethical codes developed by the American Medical Association (1), the National Association of Social Workers (2), and the American Psychological Association (3). All claim respect for the confidentiality of client or patient communications and, by implication, for the individual's right to the privacy of his or her contacts. Individual mental health professionals appear to differ in their interpretations of patient rights to confidentiality, and they may employ differing procedures regarding these rights. The manner in which this is done also seems to be contingent on the purpose and nature of the particular clinical interaction in which they are engaged and the source of reimbursement for their services (4–10).

PURPOSES OF SURVEY

In an earlier article (6) one of us (J.O.N.) discussed what he called the practice of "selective confidentiality" by mental health professionals. This term referred to the routine reporting of names and other information about patients by mental health centers to their state offices of mental health (or their equivalent) without the patient's knowledge or consent. As far as he could determine, this practice was prevalent.

To investigate the extent to which identifying information is routinely reported to central offices, a brief questionnaire was constructed and sent to all 54 active members of the National Association of State Mental Health Program Directors (11). These included directors in the 50 United States plus the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. Forty-six completed surveys were returned in response to the first mailing. A follow-up request was made to the 8 states or territories that had not responded to the original mailing. In response to the follow-up mailing 1 additional state returned the questionnaire, increasing the total number to 47 for an 87% rate of return.

A very similar questionnaire was also sent to a sample of 210 comprehensive mental health centers representing all of the United States and its territories. The centers were obtained from the directory of comprehensive mental health centers (12). One hundred eighteen of the centers (56%) returned completed questionnaires, representing all but 2 states and 2 territories. Taken together, information was received either from the state director or from at least 1 mental health center in all 50 states plus the District of Columbia; 1 territory failed to respond at either level.

For our purposes the definition of potentially identifying information was limited to names, addresses, and Social Security numbers, although other categories of information were included on the questionnaire.

State directors of mental health programs and directors of mental health centers appeared to be interested in the issues of patient confidentiality and privacy. Ninety-six percent of the state directors and 95% of the mental health center directors who returned completed questionnaires requested the results of the survey. Furthermore, 68% of the state directors and 42% of the mental health centers reported that they were currently considering revisions of the kinds of information they either requested or submitted.

RESULTS

1. Nature and frequency of identifying information reported by mental health centers and received by state directors. The first question asked of the mental health centers was, "Which of the following items of information do you report to your state department of mental health or its equivalent about the individuals served by your center?" The responses were as follows: name, 30%; address, 31%; Social Security number, 25%; and one or more of the preceding, 51%.

The state directors were asked whether they re-

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TABLE 1
Responses of 47 State Directors to Question on Percentage of Agencies Reporting Potentially Identifying Information

Response	State Directors Who Checked Response	
	Number	Percent
Percentage of agencies reporting identifying information		
100%	10	21.0
80%–99%	4	8.5
60%–80%	1	2.0
40%–60%	4	8.5
20%–40%	4	8.5
1%–20%	5	11.0
None	12	25.5
No response	7	15.0

ceived these identifying data from mental health centers. Their responses were as follows: name, 28%; address, 34%; Social Security number, 23%; and one or more of the preceding, 66%.

The percentages reported by the state directors were comparable to those reported by the mental health centers.

The state directors were requested to respond to another comparable question: "What would you estimate to be the approximate percentage of reporting agencies who report information that could be potentially identifying of the individual served? (Those facilities that report one or more of the following items of information: name, address, Social Security number.)" Table 1 shows their responses to this question, which were very similar to the responses to the preceding one. Sixty percent of the state directors reported receiving one or more identifying types of information from the agencies in their respective states.

2. The extent to which informed consent practiced. To determine the extent to which individuals were informed or made aware that information about them might be sent to a state office, the following was asked of the mental health centers: "Are individuals advised that their names or other identifying information may be reported to the state office?"

The state directors were asked, "Are individuals advised that their names or other identifying information may be reported to your agency?"

Twenty-six percent of the mental health centers and 30% of the state directors said yes to this question, and 61% of the mental health centers and 15% of the state directors said no. Thirty-eight percent of the directors said that they did not know, and 13% of the centers and 17% of the directors did not respond to the question.

It is important to note that the figure of 61% for negative responses of mental health centers is an inflated one because this response category was chosen by mental health centers that had policies restricting the reporting of identifying information. To be consistent with their responses to the first question, they should not have responded to this one.

To clarify these responses, both questions were analyzed together. A tally was made of mental health centers that indicated they routinely reported identifying information on the first question and that responded to the no category on the later question. These results revealed that 36% of the mental health centers that acknowledged reporting identifying information *did not inform their patients that they did so.*

Both questionnaires inquired into the possibility that a patient could refuse permission to report identifying information and still obtain services. The question was, "If so, are individuals permitted to refuse permission for this and still obtain services?" Thirty-four percent of the mental health centers and 34% of the state directors said yes; 9% of the centers and 6% of the directors said no; 19% of the directors said they did not know; and 57% of the centers and 40% of the directors did not answer the question.

The large percentages of no response were to be anticipated because response to this question was contingent on the response to the preceding one.

Discussion. The extent to which identifying information was reported is somewhat surprising in view of the growing concern over patient rights to privacy. Reporting of this nature appears to be contrary to the ethical stance of all three major mental health professions, especially if the information is provided without the patient's full and informed consent (7).

We believe that it is reflective of the sensitivity to these issues, and perhaps of a lack of knowledge of the practices at the local mental health center level, that 38% of the state directors said they did not know whether the patient was advised that information was reported to the state. Thirty-six percent of the mental health centers acknowledged that the patient was not informed. Although this is possibly an underestimate, it indicates that although reporting identifying information remains a prevalent practice, it is not so widespread a phenomenon as has been alleged (6). Inconsistencies regarding the amount of identifying information that was made available to state offices are to be noted.

3. The extent of discretion allowed mental health centers in reporting. Inquiry was made about the discretionary powers that the mental health centers might exercise over the reporting of identifying information, i.e., did the mental health center have the option to be selective about the information reported to the state?

The question was, "Is your facility allowed to use its own discretion in reporting certain items of information? (For example, you may not wish to report individual names, but may report Social Security numbers or you may report only demographic characteristics.)"

For the state directors the beginning part of this question was, "Are the reporting facilities allowed . . . ."

The replies were as follows: 58% of the mental health centers and 43% of the state directors said yes;

37% of the centers and 49% of the directors said no; and 5% of the centers and 8% of the directors did not answer the question.

We also inquired into the manner in which state reporting requirements were made known to mental health centers: "If you are allowed to use your own discretion, how were you made aware of this policy?" Nine percent of the mental health centers and 2% of the state directors said state law prohibited the reporting of identifying information; 23% of the centers and 36% of the directors said they knew of the policy through a central office bulletin; 12% of the centers and 9% of the directors said the reporting agencies asked about the policy and were told; 20% of the centers and 13% of the directors answered "other"; and 36% of the centers and 40% of the directors did not respond to the question.

Discussion. It was only when the individual mental health center questionnaires within a state were compared with each other and with the questionnaire of their state director that we became aware of the many contradictions in reporting and the differing reporting policies that existed within the several states.

In some instances mental health centers indicated that they were allowed no discretion in reporting but the state director of the same state indicated that the mental health centers had discretionary powers in deciding what if any identifying information to report. The centers within a single state might report mutually exclusive policies regarding reporting, some saying that they had discretion and others reporting they did not. At the same time the state director might reply that discretion was allowed.

Frequently, when discretion was permitted and the mental health centers were aware of their discretionary options, they reported all three basic identifying data: name, address, and Social Security number. Some states had two or more reporting systems, apparently depending on the source of financial support for the local center. Furthermore, a number of states indicated that there were different reporting procedures for the following categories: inpatient services, mental retardation services or care, mental hospital residence, drug and alcohol programs, and whether the individual was insured by a particular legislative program. In addition, a few centers reported taking a position against state office requirements to report identifying information.

4. Life span and confidentiality of patient records. The protection of patient confidentiality is also a function of the policy governing patients' files. The state directors were asked two questions about this issue.

The first was, "What are your policies regarding patient files or records at the local level?" Fifty-three percent of the directors stated that each facility decided this for itself; 21% advocated life spans for records ranging from 3 to 30 years (median of 6 years) after termination of services; 19% stated that indefinite storage of records was advocated; and 6% chose the response category "other."

The second question was, "What are your policies regarding patient records at the state level? (This would be the information provided to your office by the various reporting facilities.)" Twenty-six percent of the directors advocated life spans ranging from 6 months to 10 years (median of 4 years); 57% stated that records were kept indefinitely; 15% chose the response category "other"; and 2% did not answer the question.

The mental health centers were asked, "What are your policies regarding patient files or records?" Nine percent of the centers reported a range from 3 to 15 years after which they destroyed patient records or files (median of 10 years); 81% stated they stored records indefinitely; 8% chose the response category "other"; and 2% did not answer the question.

The most frequent policy governing patient records or files was to store them indefinitely, whether at the state or local level. A number of state directors indicated, however, that their records did not include identifying information. This would be consistent with states that reported policies not requiring identifying information.

Another aspect of privacy and confidentiality explored was the question of access of other agencies to mental health center files. We inquired of the centers, "Do other agencies have limited access to files of certain populations of clients? (Such as welfare agencies who may be paying for the service you are providing the client.)" Thirty-one percent of the centers said yes; 64% said no; and 4% did not answer.

The centers were then asked, "If yes, please list each agency below and indicate the type of information to which they do have access."

Written notes on questionnaires revealed a diversity of practices regarding third parties. Typically a signed consent form was required whether the respondent replied yes or no to this question. Some mental health centers routinely sent information to certain referral sources without obtaining the patient's signed consent but did not send information to other agencies or referral sources unless they had obtained consent. No mental health center mentioned a policy of no contact with third-party inquiries.

CONCLUSIONS

It appears that a complete examination of patient privacy is long overdue. The interest demonstrated by many of our respondents indicates their awareness that changes more in keeping with the protection of patient privacy should be made. In a few instances there was an expression of need to report more fully identifying information than had been reported in the past because of the "current emphasis on accountability" or because the state was planning to participate in the Multi-State Information System (13). These concerns are illustrative of the potential conflicts that may emerge when considering the value of protecting

the privacy rights of individuals as opposed to other competing values or demands, such as cost accountability, access to records for research purposes, and program evaluation.[1]

Perhaps the most disturbing piece of data obtained was that legislative protection of patient privacy that prohibits the reporting of name, address, or Social Security number apparently has been enacted in only 1 state, Connecticut. One state director indicated that legislation existed prohibiting the state-level office from requiring the reporting of the names of individuals from mental health centers, but the centers could and did voluntarily report such information. The same state requires mental health centers to report the addresses of individuals; reporting of Social Security numbers remains permissive.

It was surprising that 66% of the state directors reported that they received at least some identifying information from mental health centers. This and the fact that a large percentage (36%) of the centers did not inform their patients that this information was being reported about them raises serious questions about the routine violations of the privacy of thousands of individuals who apply for services at their local mental health centers throughout the United States and its territories. However, we would assume that a higher percentage of identifying information is actually being reported because of the competing reporting systems found in many states. Furthermore, there seems to be a growing reliance on Social Security numbers as more welfare funds are allocated for these services. The results also reveal contradictory reporting practices and policies, uncertainty about record keeping, differing practices regarding third-party inquiries concerning services rendered on behalf of third parties, and varying demands and expectations from differing policy-establishing groups.

If it is accepted that a person is entitled to privacy regarding contact with a mental health center (or a private practitioner, for that matter), the implementation of the concept of informed consent would appear to be a crucial consideration. Ultimately, a much more satisfactory step toward ensuring privacy would be legislative action prohibiting the reporting of identifying information to any state agency or to any other information-pooling agency. In light of the fact that legislative action is often a slow remedial device, implementation of policy at state and local levels probably would prove to be more expeditious.

The matter of patient records is another area begging for correction. We are constrained to ask why records are kept as if they were as valuable as gold coin collections. The potential violation of the individual's right to privacy and confidentiality is too great not to explore this area thoroughly.

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[1]The Research and Evaluation Division of the New Mexico Department of Hospitals and Institutions has been considering a nonunique tracking system that offers one solution to these apparent dilemmas. This computerized system has a built-in error-in-identification rate that, although acceptable for research or cost-analysis purposes, is not acceptable for legal purposes or other official inquiry. Although this proposal was made for state office operation, it could conceivably be implemented at the mental health center or agency level as a replacement for individually identified files.

Patients' Perceptions of the Therapeutic Relationship and Group Therapy Outcome

BY ALAN S. GURMAN, PH.D., AND JAMES P. GUSTAFSON, M.D.

The authors review the empirical literature examining the hypothesized relationship between the patient's perception of the therapeutic relationship and treatment outcome in group therapy and describe studies of both inpatient and outpatient group therapy. Their review indicates that, in contrast to the overwhelming evidence in support of the perceived relationship-outcome hypothesis in individual psychotherapy, there is no persuasive evidence in favor of the proposed relationship between the therapist-patient relationship and the efficacy of group treatment. The authors discuss the clinical and theoretical differences between individual and group therapy that would contribute to this result.

ALL MAJOR SYSTEMS of psychotherapy have emphasized the importance of the therapist-patient relationship, although their explanatory languages for the centrality of the relationship construct clearly vary. Social psychological theories highlight the mediational role of the relationship in arguing that the patient's attraction to the therapist heightens the therapist's ability to influence the patient toward therapeutic ends (1–3). Social learning approaches emphasize the therapist's role in the relationship as that of a salient source for modeling and reinforcement of new patient behavior (4). The neoanalytic writings of Fromm-Reichmann (5), Menninger (6), and Sullivan (7) support the common observation that analytically oriented therapists view the resolution of the neurotic distortions of the relationship as the cornerstone of their work. More recently, Strupp (8) argued that the parent-child relationship established in dynamic psychotherapy is the key source of the therapist's influence.

The most emphatic statement of the necessity of a facilitative therapeutic relationship for positive personality change has been made by Rogers (9), who went so far as to argue for the sufficiency of the conditions of empathy, warmth, and genuineness for effective psychotherapy. Nearly two decades of research have now made it clear that such relationship dimensions are rarely sufficient for patient change in individual psychotherapy (10), but it seems difficult to impugn their necessity, at least as preconditions for change. The predominant mode of assessment of the therapeutic relationship has been the rating of tape-recorded therapy interactions by trained nonparticipant judges. Thus, as Howard and Orlinsky (11) noted, most research in this area has been misguided on theoretical grounds, in that Rogers stated unambiguously that the mere offering of therapeutic conditions to a patient is not sufficient for positive change (9). Rather, these attitudes or styles of relating must be communicated to the patient, i.e., the patient must perceive them for change to occur.

Evidence has also been adduced that tape-rated therapeutic conditions are generally predictive of patient change in group psychotherapy (12). The purpose of the present paper is to evaluate the empirical and theoretical status of Rogers' (9) perceived-conditions–outcome hypothesis in group therapy in light of the fact that data from research in this domain are clearly more consistent with the theoretical underpinnings of the relationship construct than are those based on the perceptions of external judges.

More than technical issues arise in applying Rogers' hypothesis to group therapy. Rogers himself suggested that in the group situation leader acceptance may be less important than acceptance and understanding from peers (13). Hence, the correlation of outcome with desired leader qualities may not yield significant results. Yalom's outcome study of outpatient group therapy (13) supports this idea: he found that popularity with other group members and cohesiveness of the group were the only two factors associated with good outcome. Even if we consider leader characteristics alone, it seems that the variables of empathy, warmth, and genuineness represent only a part of the necessary attributes of the successful group leader.

The study of encounter groups by Lieberman and associates (14) demonstrated that the successful leader must provide a clear cognitive framework for group members to be able to make good use of their affective experiences. Yalom (13) suggested that in a group the tripartite analogy to the good relationship of individual therapy is the patient's relationship to his group therapist, to the other group members, and to the group as a whole. That is, the relationship with the therapist is only one of the critical aspects of the group therapy interaction that can influence outcome.

A further difficulty with the client-centered hypothe-

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sis in group therapy is that many schools of group therapy systematically attempt to influence the group members through variables other than the leader's empathy, warmth, and genuineness. The obvious examples of this are schools of group therapy that emphasize a group-centered rather than a leader-centered approach. Yalom's technique, for example, although it also attempts to use the leader-patient relationship, relies heavily on the "social engineering" of the group situation. Another technique of this type is that recommended by Whitaker and Lieberman (15), which attempts to help the group find less restrictive solutions to its shared conflicts.

At the other end of the continuum are schools of group therapy that rely almost entirely on an intense pairing relationship between therapist and patient and use the group as a chorus. The outcomes of such leader-centered groups would seem to depend more heavily on the personal qualities of the leader and thus be more likely to confirm the client-centered hypothesis. Examples of this type are many Gestalt, transactional analysis, and psychoanalytic group therapies. Of course, most contemporary schools are both leader-centered and group-centered, at least in some aspects.

A clearly intermediate strategy is that recommended by Foulkes (16), in which the leader permits the group to be leader-centered in the beginning, gradually helping the group to shift toward a more democratic peer-oriented style as the group masters its relationship with the authority of the leader. Hence, in that kind of group we might expect to find the client-centered hypothesis confirmed in the early stages of the group but not in the later stages.

With these important reservations in mind, we examine the existing data that focus solely on the relationship between the patient's perception of therapist empathy, warmth, and genuineness and outcome in group therapy.

PATIENTS' PERCEPTIONS OF THE THERAPEUTIC RELATIONSHIP IN GROUP THERAPY

A summary of empirical studies of the perceived-therapeutic-conditions–outcome hypothesis in group therapy is presented in table 1. Only 11 studies testing the hypothesis in question have been conducted under actual treatment conditions, 6 with outpatients and 5 with inpatients. The patient's perception of the therapist-patient relationship was assessed by either the Relationship Inventory of Barrett-Lennard (RI) (28) or the Truax Relationship Questionnaire (22), both of which have been found to share a good deal of common factor variance (29).

Among the outpatient studies (17, 19–21, 27) only those of Truax and associates (27) and Hansen and associates (19) found even tenuous support for the proposed positive relationship between patient-perceived therapeutic conditions and outcome. In Truax and associates' study, of the 69 correlations computed between 23 change measures and therapist empathy, warmth, and genuineness, only 9 were statistically significant. Because 4 correlations would be expected to reach statistical significance ($p<.05$) on the basis of chance alone, the reported positive correlations appear to just minimally exceed this level and, at best, can be interpreted as providing only very weak evidence for the perceived-conditions–outcome hypothesis. All but 1 of these significant correlations were obtained on MMPI change measures, and only 1 of the 15 conditions—Q-sort correlations—was significant. In addition, the obtained significant correlations were quite low (range, .23–.31), and over a third of the correlations were of zero-order magnitude.

The first study by Hansen and associates (19) found a significant rank-order correlation (.83) between group members' perceptions of their group leader's therapeutic conditions and self-concept change based on a Q-sort. The authors' data analysis was based on the mean perceived conditions and mean self-concept change within each of their treatment groups, yielding an N of 6. The more appropriate statistical analysis, and the only one that would have allowed direct testing of the Rogerian hypothesis, would have involved Pearson's product-moment correlation of individual members' scores on these two measures. Unfortunately, therefore, the authors' inappropriate data analysis obscures the meaning of their finding and may explain why this result failed to be replicated in a later study by Hansen and associates (20), in which the appropriate correlational analysis was performed.

Further support of the lack of evidence for the perceived-conditions–outcome hypothesis in outpatient group therapy is derived from the overwhelmingly negative results obtained in the study with the soundest methodological quality (17). We used the raw data provided by these authors to compare composite overall change scores (positive versus negative) and RI scores (above and below the group median). We found nonsignificant differences according to chi-square analysis.

Studies testing the hypothesis in question with hospitalized patients report more mixed but also largely negative results. The study of hospitalized mental patients of Truax and associates (25) showed unequivocally negative results for the perceived-conditions–outcome hypothesis. Roback and Strassberg's results with severely disturbed patients (23) also failed to support the hypothesis.

More mixed results were obtained in two studies by Truax and associates, one conducted with hospitalized psychotic patients and institutionalized juvenile delinquents (24) and one conducted with institutionalized delinquents only (26). In the first of these studies (24), perceived unconditionality of regard and congruence but not empathy and level of regard were significantly related to a composite final outcome criterion (FOC), composed of 8 change indices. The clinical meaning of these positive correlations is largely obscured by the unfortunate inclusion of both behavioral and self-re-

TABLE 1
Summary of Studies of Patients' Perceptions of the Therapeutic Relationship and Treatment Outcome in Group Therapy

Study	Subjects	Average Number of Sessions	Outcome Criteria*	Principal Finding*
Abramowitz and Abramowitz (17)	26 college students (4 groups)	10	10 measures (e.g., self-esteem, anxiety, alienation, and internal control)	Perceived TH conditions not related to outcome in either insight or noninsight groups
Anderson and associates (18)	61 hospitalized acute patients, most with schizophrenic or depressive reactions (4 groups)	30	T and P global ratings of session satisfaction (120 total sessions)	TH understanding (E) and interest (R) related to satisfaction
Hansen and associates (19)	50 students in grades 8–12 (6 groups)	12	Self-concept	Mean (across groups) self-concept change and mean (across groups) perceived TH conditions significantly related
Hansen and associates (20)	70 students in grades 8–12 with school behavior problems (9 groups)	12	Self-concept change	Perceived TH conditions not related to outcome
Lindahl (21)**	22 undergraduate college students (4 groups)	20	FIRO-B discrepancy scores, real versus ideal self, social anxiety, Eysenck Personality Inventory	Perceived TH conditions related to some change measures, but generally no support for the hypothesis of relationship of conditions and change
Lindahl (21)**	34 undergraduate college students (7 groups)	30	FIRO-B discrepancy scores, real versus ideal self, social anxiety, Eysenck Personality Inventory	Perceived TH conditions related to some change measures, but generally no support for the hypothesis of relationship of conditions and change
Roback and Strassberg (23)	18 hospitalized schizophrenic patients (3 groups)	16–30	Behavioral (e.g., Wittenborn scales) and self-report (e.g., MMPI)	Perceived conditions not related to either behavioral or psychometric change indices
Truax (24)	80 hospitalized schizophrenic patients (4 groups) and institutionalized juvenile delinquents (4 groups)	24	Composite final outcome criterion (FOC) based on 8 measures (e.g., MMPI, time out of institution, Q-sort adjustment)	Perceived C and U related to FOC; E and R not related
Truax and associates (25)***	63 hospitalized psychiatric patients	—	Hospitalization status, various Q-sorts, composite outcome index	Perceived E, warmth, and genuineness not related to outcome
Truax and associates (26)***	74 institutionalized male and female juvenile delinquents	—	Days institutionalized (1-year follow-up), Minnesota Counseling Inventory, various Q-sorts	Perceived E, warmth, and genuineness significantly related to all self-report measures, but not related to behavioral criterion (days out of institution)
Truax and associates (27)***	52 outpatients	—	MMPI, various Q-sorts	Perceived conditions significantly related to several but not all outcome criteria

*TH=therapist, P=patient, E=empathy, R=level of regard, U=unconditionality of regard, C=congruence, and T=total conditions. E,R,U,C, or T appearing in parentheses implies presumed equivalence with the relationship measure actually used.
**Used Truax Relationship Questionnaire (22). The authors reported two studies, the second being a replication of the first. Both "clients" (members "who were or had been in contact with the student psychiatric clinic or any other equivalent form of institution") and "nonclients" (students "interested in participating in a group experience") were included in the groups for these studies.
***As reported in Truax and Carkhuff (22); used Truax Relationship Questionnaire (22).

port measures in the FOC. Thus, on the basis of the findings presented it is impossible to determine whether perceived therapeutic conditions were differentially associated with these two importantly different sources of change evaluation. Comprehension of even the empirical meaning of Truax' data is even further obfuscated by his failure to report his findings on these two patient populations separately. In the second study (26), stronger support for the perceived-conditions–outcome hypothesis was found. Almost all self-report measures were significantly correlated with perceived conditions, but hospitalized recidivism was unrelated to these perceptions.

Only the group therapy study of Anderson and associates (18) found consistently positive relationships between perceived conditions and rated outcome. Studying hospitalized schizophrenic patients with more acute disturbances than in any other of the studies of

inpatients, Anderson and associates found significant relationships between patient-perceived therapist "understanding" and "interest" (according to ratings on 6-point scales) and patient satisfaction with treatment.

DISCUSSION

In sum, the client-centered perceived-conditions–outcome hypothesis has generally failed to be confirmed in the context of group therapy with both inpatients and outpatients. This finding is indeed striking when contrasted to the overwhelming support for the hypothesis in a wide variety of individual therapy contexts. One of us (A.S.G.) found support for the perceived-conditions–outcome hypothesis in 23 of 26 studies of individual therapy and counseling reported in the literature (30). Why then does the hypothesis fail to be confirmed in the studies of group therapy? Does this result mean that group therapy has essential differences from individual therapy?

Direct evidence in support of any specific interpretation of this difference is meager. Certainly the therapeutic rationale for a given school of group therapy can emphasize either the similarity or the difference from individual therapy and then technically exploit the similarity or the difference, as we described earlier. We also think that variables other than the theoretical stance of the group therapist influence whether the group approximates individual therapy or departs from it.

Given these possible differences in group therapy technique and strategy and their import for outcome, we have been very surprised and then very critical of the virtual absence of sufficient descriptions of group therapy technique in the studies we reviewed. Most of the studies did not even raise the matter of technique, and the few that did merely summarized the technique in a sentence or two and in a cursory manner that left the reader wondering how the group actually functioned. The failure to confirm Rogers' hypothesis, then, may simply be a function of how these groups were managed, i.e., they were not managed in a way that would make central the client-centered triad of therapist qualities. Without an adequate description of technique and without some report of the actual processes of these groups we have no way of sorting out group therapies that might confirm the hypothesis from those which might not. As is common to all early empirical research of any new subject, dimensions that are very different in kind get mixed together indiscriminately so that no clear correlation with outcome can be expected. It seems clear that group therapy research must begin to clarify the major differences in technique so that the effects of each kind of intervention can be examined separately. Lieberman and associates' *Encounter Groups: First Facts* (14) is a welcome model for this direction; we feel that this model should now be followed in group therapy proper.

How may group therapy depart significantly from individual therapy and thus be more likely to disconfirm the client-centered hypothesis? First, as we have stated, the therapeutic strategy may systematically deemphasize the role of the leader and emphasize the peer relations within the group. The group therapist may become a shadowy figure by design and may avoid interpretation of his or her position in the group. Second, even though the leader may intend to emphasize his or her relations with the group, the group may choose to deemphasize the leader. There are several ways in which this can happen: the group may constructively revolt and proceed to work independently and well, so that the therapist allows this process to continue (31); or the group may become pleased with its own curative powers and come to regard itself as a "Utopian" group (32) that wishes to exclude the establishment figure of the therapist. Surely all group therapists are familiar with phases of this kind of group activity. Third, the group situation may produce dangers different from individual therapy that require the therapist to be much more than empathic, warm, and genuine. The group may become quite vicious in its treatment of some members, or one or several of the members may show difficulties that are very frightening to the group. In these situations, the therapist must demonstrate rather forceful qualities if the group situation is to remain viable. If these kinds of problems are recurrent, the group therapist must repeatedly demonstrate certain qualities, including forceful and firm intervention, which might become his most important perceived qualities for the group members in relation to therapy outcome. These perceived qualities might become much more important than the perceived client-centered triad and thus explain disconfirmation of the Rogerian hypothesis.

Conversely, how may group therapy approximate individual therapy and be more likely to confirm Rogers' hypothesis? First, the technique may center on leader-client relations, as we have stated. Second, the group may defend itself in the group situation by idealizing the therapist (16) and emphasizing his or her personal goodness. Third, the group may avoid the dangers that are more likely to demand other attributes from the leader. The group may avoid confusion by a very explicit therapeutic language (like transactional analysis) and thus require less of the leader's intellectual abilities; it may avoid frightening situations with individual members by such therapeutic rituals as turn-taking or by careful preselection of members. In these ways, something like individual therapy may characterize a group and lead to confirmation of the importance of those perceived therapist conditions which are important in individual therapy.

This discussion should also suggest why cognitive structuring may be more important in group therapy than in individual therapy (14) and why it may be a necessary precondition for the operation of the variables of therapist empathy, warmth, and genuineness. Unless a group is sufficiently controlled and restrained by a common vocabulary, ritual, and intellectual belief

about how the therapy and the group works, the therapist is unlikely to be able to assume a role as a good empathic father or mother or be perceived as such. He or she will need, instead, to expend considerable effort and attention in managing other aspects of the group situation and be less available for relations with each individual in the group. Hence, the members are less apt to perceive the leader as empathic to individual concerns.

CONCLUSIONS

We argue that Rogers' hypothesized relationship between patient perceptions of the therapeutic relationship and treatment outcome, as applied to group therapy, cannot be meaningfully studied without consideration and control of several other salient variables. In general, we predict that the client-centered hypothesis probably would be confirmed only for groups that center on leader-client relations, that idealize the leader, and that are relatively untroubled by major group difficulties. The absence of major difficulties would probably presuppose a clearly explicit therapeutic ideology adopted by the group members. Progress in clinically relevant group therapy research, as in individual therapy research (33), is dependent on more sophisticated specification and control of variables in order to demonstrate their unique contribution to treatment outcome. Confirmation or disconfirmation of the client-centered hypothesis discussed here demands this kind of differential inquiry.

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In Search of the True Amok: Amok as Viewed Within the Malay Culture

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In an attempt to discover how the phenomenon of amok is viewed within its indigenous culture, the authors studied and interviewed 21 subjects in West Malaysia who were labeled as amok. This investigation showed that both the subjects and the Malay culture view amok as psychopathology, that amok cases are disposed of in line with this view, and that the behavior of the amok person conforms to social expectations of the phenomenon. Despite cultural proscriptions, however, the act is purposive and motivated and is subtly sanctioned by Malay society.

THE PHENOMENON OF amok has fascinated Western travelers, government officials, and social scientists for over two centuries, as evidenced by the large body of literature devoted to its description (1). The term "amok" refers to a violent or furious assault of homicidal intensity and is associated with the indigenous peoples of the Malay archipelago, although incidents of the amok syndrome have been reported as far east as New Guinea (2) and north into Laos (3).

In the past decade the phenomenon has come to the attention of transcultural researchers (4–7), who view amok as a form of behavioral disorder, specifically a "culture-bound reactive syndrome" (5). According to Yap, "certain systems of implicit values, social structure, and obviously shared beliefs produce unusual forms of psychopathology that are confined to special areas . . . although these are only atypical variations of generally distributed psychogenic disorders" (5, p. 38).

Despite this interest in amok, to our knowledge only three clinical studies of the disorder have been conducted in the Malay archipelago in the last 30 years (7, p. 41; 8, 9) and apparently none in which the phenomenon was investigated within the context of the belief system of the patient labeled as amok. The purpose of this study, therefore, was to locate, study, and interview a group of individuals defined as amok in order to identify how amok is viewed within the Malaysian culture. Specifically, we sought answers to the following questions:

1. Is amok viewed as a form of psychopathology within the culture in which it originates?
2. Is it viewed as such by the individuals who engage in the behavior?
3. Do the views of these individuals concur with the indigenous culture's definition of the phenomenon, its causes, course, and supporting values and beliefs?
4. Is the amok behavior of individuals considered amok consistent with that definition?

THE INDIGENOUS DIAGNOSTIC-DISPOSITION SYSTEM FOR AMOK

In Malaysia, as in any other country, murder and assault are civil crimes. However, no *pengamok* (one who runs amok) is to be found in the country's prisons. Instead, 21 amok subjects were found among the 134 patients of the male security ward of Hospital Bahagia, a large mental hospital in the town of Ulu Kinta in West Malaysia.

The designation "amok" was part of the patients' hospital records, which also revealed that in each of the 21 cases this designation was used by the local Malay police in the town in which the patient was originally apprehended. This labeling influenced a series of subsequent decisions resulting in confinement in a state mental hospital and entry into the Western psychiatric nosology system. Following arrest, the subject was remanded to the magistrate's court, where the judge received evidence from a district medical officer that the suspect was of "unsound mind" and incapable of a defense. Trial would then be postponed and the suspect remanded to the state hospital for observation, diagnosis, and treatment. Malay district medical officers have limited training and experience with psychiatric diagnosis, and physicians familiar with the procedure indicated to us that the designation of "unsound mind" was often based on the police report of the amok behavior and not infrequently was made without any examination of the patient. In each of the cases we studied, the magistrate was satisfied that the accused

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was "guilty but insane," i.e., incapable of knowing the nature of the act or that it was wrong. Therefore, each case was reported to the sultan or governor of the state, who ordered the offender confined in a mental hospital. Upon admission to the hospital, either for observation or longer term commitment, each patient received a psychiatric diagnosis (usually "schizophrenic") that was taken from the Western-oriented psychiatric nomenclature.

RECORD SEARCH AND INTERVIEWS WITH THE SUBJECTS

The hospital records of the 21 subjects were searched for data relevant to the amok incident. Following the collection of this material a standard interview of each patient was conducted jointly by the authors in the patient's native language. Each question and response was immediately translated into English and a second translator (a member of the hospital staff) was present at all times to validate the primary translation. The entire interview including translation was tape-recorded and subsequently rechecked for accuracy.

Following the interview each paitent was taken to a section of the ward where he could not discuss the nature of the interview with patients still waiting to be seen. None of the patients was informed of the purpose of the interview before being seen.

DESCRIPTION OF THE SUBJECTS

All the 21 patients we studied came from rural areas or small towns where, generally, police officers are Malay. Although all of the patients were products of this legal-cultural system of identification, they could be divided into the following three distinct groups: 1) those familiar with the term "amok" and nonpsychotic at the time of the interview, as judged by the authors and the ward supervisor (N=10); 2) those not familiar with the term "amok" and nonpsychotic (N=6); and 3) those clearly psychotic at the time of the interview (N=5).

Table 1 presents a descriptive summary of the amok incidents for each group. The patients in group 1 were all Malay, from rural areas, and employed in rural occupations, e.g., paddy planter. The patients in group 2 were Chinese or Indian, from urban areas, and were employed in mercantile occupations, e.g., shop clerk. The psychotic patients (group 3), who included 4 Malays and 1 Chinese, were generally from urban areas and unemployed or marginally employed.

Whereas for groups 1 and 2 the amok incidents span three decades, the group 3 incidents appear to be of more recent origin. The significance of this is unclear, although Murphy (7) has argued that placing amok within the context of the psychoses is a relatively recent development. An additional surprising and unexplained finding was that 50% of the incidents in groups 1 and 2 occurred in the month of May.

Group 1 accounted for a higher average number of assaults (4.3 deaths and injuries) than either group 2 (2.5) or group 3 (2.2). It would appear that the choice of a victim was a function of ethnic origin and political status, i.e., Malays assaulted Malays and Chinese, Chinese assaulted Chinese and Indians, and Indians assaulted only Indians. Similarly, the choice of weapon seems to reflect the ethnic origin of the subject, with group 1 preferring the parang (a short sword or machete), while vocational tools are more in evidence in group 2.

Only group 1 approximates the classical description of the *pengamok*: Malay, age 30 or more, rural villager, committing multiple assaults, and using a parang, spear, or kris (curved dagger). By contrast, group 2, all Chinese, had no notion of the concept amok ("I am not familiar with that English term"), fewer victims, and more varied choice of weapons. These were men who murdered or assaulted in a fit of rage, had no culture-specific explanation for what they did, and were unfamiliar with the explanation provided by the Malay policeman. Such subjects hardly qualify as the true amok.

Group 3 subjects also have dubious qualifications as true amoks. They were primarily Malay (except one Chinese) but were marginally adjusted and unemployed prior to the amok incident. At the time of the interview, each was clearly psychotic and had been throughout the course of that hospitalization (range= 2–24 years). Whereas the patients in groups 1 and 2 had had a mean symptom-free period of 9.4 and 9.6 years respectively, the patients in group 3 had previously been free of symptoms for an average of 1.2 years. Thus the clinical descriptions of these patients appear to more closely approximate the criteria for chronic psychosis.

THE TRADITIONAL MALAY VIEW OF AMOK

The evidence we gathered supports the view that amok is considered a form of mental illness within the Malay culture. Whether or not a subject was amok, once labeled as such the culture channeled him into a psychiatric hospital. No amoks can be found in prisons, or, to our knowledge, in any nonpsychiatric institutions within Malaysia. They have committed crimes, but crimes considered to be the result of insanity. Nor is this merely a product of Western psychiatric diagnosis. Once the amok enters the psychiatric institution he is likely to be labeled "schizophrenic," but the system that leads him there has already made a judgment regarding his sanity without benefit of psychiatric evaluation.

This judgment is based upon Malay concepts of mental illness, which include a specific form of insanity called *gila mengamok*. *Gila mengamok* is considered an extreme form of *gila kena hantu* (insanity due to evil spirits) or *gila buatan orang* (insanity caused by

TABLE 1
Description of Three Groups of Patients Labeled Amok (N = 21)

Item	Group 1 (N=10)	Group 2 (N=6)	Group 3 (N=5)
Mental status at time of study	Normal	Normal	Psychotic
Age at time of study (average age in parentheses)	22–71 (41)	40–61 (55)	30–54 (36)
Ethnic origin	All Malay	4 Chinese, 2 Indian	4 Malay, 1 Chinese
Area of residence	Rural	Small town	Small town
Occupation	Rural-related	Mercantile	Unemployed or marginally employed
Date of amok incident	1946–1974	1951–1973	1961–1972
Age at time of amok incident (average age in parentheses)	21–42 (33)	30–43 (39)	25–30 (28)
Ethnic origin of victims	22 Malay, 21 Chinese	8 Chinese, 7 Indian	10 Malay, 1 Chinese
Weapons used in amok incident	Parang, kris, spear	Tools	Parang, tools
Plans regarding further hospitalization	Get out (N=5) Stay in (N=5)	Get out (N=5) Stay in (N=1)	Get out (N=1) Stay in (N=4)
Presence of family support	Yes (N=7) No (N=3)	Yes (N=3) No (N=3)	No (N=5)

witchcraft). Both are characterized by fits of violence and a superhuman ability to wreak destruction. In the extreme form of *gila mengamok* this may result in indiscriminate injury and death (10, 11).

COMPARISON OF THE VIEWS OF THE PENGAMOKS AND SOCIETY

Of the 10 nonpsychotic subjects interviewed who claimed familiarity with the term "amok," 9 emphatically insisted that amok was an illness. The term was also described as a state or an act that usually was related to illness, although one subject was not certain of this. These 10 subjects, who may be considered true amoks, were remarkably consistent in their definition of amok, as can be seen in appendix 1.

In important details the composite definition provided by these 10 true amoks is consistent with the traditional view of amok (12), i.e., a furious assault commonly found in Malay males, especially farmers and mountain dwellers, unrelated to suicide, drugs, or alcohol (none of which were ever mentioned by our subjects) but instead related to psychical stress in the form of fright, anger, grief, or nervous depression. The attacks are preceded by vertigo ("fever") and visions ("influences"), are directed against friend and foe alike, may last a few hours, and are followed by total amnesia and deep stuporous sleep for several days.

In one detail our subjects' view varied from the traditional view. Classical descriptions refer to the difficulty of stopping the attack. Force generally is thought to be required, often resulting in the death of the *pengamok*. Only 4 of our 10 true amoks maintained that force was required. Two indicated that persuasion could be successful, and 4 stated that the attack could stop spontaneously. This deviation from the classical definition may be a product of a select sample (i.e., survivors) or of a change in the nature of the phenomenon itself (7). The records we reviewed suggest that at least within the past 30 years persuasion has been a commonly attempted tactic by police in bringing a *pengamok* under control.

In general, the behavior of the *pengamok* was consistent with their own and their society's view of amok behavior. In addition to the deviation they showed regarding modes of cessation of the attack, we noted that while our subjects indicated that anything handy was suitable as a weapon, each, in fact, selected a traditional weapon—a parang, spear, or kris. This suggests behavior designed to fulfill tradition.

THE QUESTION OF PURPOSIVENESS

Both the traditional view of the amok attack and that obtained from our amok subjects maintain that the act is unconscious, indiscriminate, and without purpose. However, history and a close look at the behavior of our subjects suggest otherwise. Several writers have commented on the sanctions afforded by Malay culture for the carrying out of a vengeful act through amok (1, 7, 12). For a supposed nonpurposive and unconscious act, it declined dramatically in popularity when the societal response at one time changed from sanction to drastic punishment (e.g., being drawn and quartered) (12).

The records of our subjects revealed that several exhibited a remarkable degree of purposiveness. One subject made his way to three separate coffee houses, all known to be frequented by Chinese, and killed five Chinese. His record further indicated that he had expressed anger toward the Chinese in response to some Chinese having killed some Malays during the civil emergency of May 13, 1969. The date of this subject's amok was May 19, 1974. Another subject killed seven

Chinese and injured five. The police report stated that the subject indicated the cause of his amok to be "racial disharmony."

According to Mahathir (13), "amok represents the external physical expression of the conflict within the Malay . . . a spilling over, an overflowing of his inner bitterness" (p. 118). This results from the Malay's traditional courtesy and self-effacing behavior, which may lead others, interpreting such diffidence as weakness and inferiority, to take advantage of him. Since his training dictates that he should never reprimand another, the Malay gives way until, in some few instances, he can give way no more. This type of stress recently led to an explosive situation culminating in the riots of May 13, 1969, which Mahathir saw as a grand amok on the part of an embittered people.

Of course, the motive for amok is not always racial. Our case histories included reports of a Malay man who killed his Chinese wife and injured two Chinese men over suspected infidelity, a Malay who killed his religious teacher and injured the teacher's wife, two Malays who attacked their sisters-in-law, and another who killed a neighbor who was provoking him. Almost all of the victims were known to the amok and were sources of criticism, frustration, or provocation.

SOCIAL STIGMATIZATIONS OF THE PENGAMOK

On admission, 7 of the 10 true amok subjects showed inappropriate behavior, manifesting delusions and/or hallucinations. On the basis of these reports we may conclude that the patients' behavior was psychotic-like. The duration of that initial "psychotic" state did not exceed 9 months in any of the patients, and 6 of the 10 were symptom free for the remainder of their hospitalization. In spite of the brevity of such "psychosis," the period of hospitalization for group 1 ranged from 1 to 28 years, with an average stay of 12.4 years. The range and mean period of hospitalization were similar for groups 2 and 3.

Why were these men not released in view of their apparent recovery? Patients within the same institution who were also diagnosed as schizophrenic but not amok had a greater likelihood of release. Aside from legal questions, the fact that these men were not released indicates an important aspect of the Malay view of amok: not only is amok viewed as a form of mental illness, but it is considered an extremely threatening illness and is greatly feared by society. While we found no evidence of recidivism, the belief that this is possible leads to extended periods of hospitalization, with little hope of release. In several instances we found explicit evidence that the family and/or community was opposed to the patient's release.

It would appear that the potentially deleterious effects of labeling a person mentally ill may be similar regardless of whether the patient is a Malaysian diagnosed according to Malay concepts of mental illness or an American diagnosed in Western terms. If this is true, the issue in diagnosis should be not so much the question of its efficacy as it is finding common attributional characteristics among the indigenous concepts upon which diagnostic systems are based (14).

CONCLUSIONS

The evidence of this study supports Yap's view of amok as a "culture-bound reactive syndrome" (5). It shows that amok is a culturally specific, complex pattern of behaviors with identifiable antecedent and consequent conditions and that it is defined as psychopathology within the indigenous culture. Despite cultural proscriptions to the contrary, amok is purposive and motivated and is subtly sanctioned by the Malay culture as an appropriate mode of response to certain situations.

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APPENDIX 1
Definition of Amok by the True Amoks (N=10)

Nature of amok: an illness (9 subjects supported this view), a state (2), an act (3).

Mental state of subject: unconscious and not responsible (9).

Preamok mental state: angry (5), normal (4), disturbed thoughts (3), anxious (2).

Causes of amok: evil spirits (4), influence of other people (3), threat (3), heat (3), God (3).

Amount of violence: always present, acute (10).

Targets: any living thing (10).

Fatalities: not necessary, any number (10).

Weapons: anything handy (10).

Reason for cessation: force (4), spontaneous recovery (4), persuasion (2).

Postamok condition of subject: amnesia (7), exhaustion (3), disturbed (2), regret (1).

Possibility of relapses: can relapse (9), but no cases known to subjects or authors (10).

Type of victims: any age, race, or sex (10).

Family response: fear (4), sympathy (4), sadness (3), depression (2).

Community response: fear (6), do not know (3), anger (2).

A New Section in the *Journal*

The *Journal* is pleased to announce the inauguration of a new section, "Clinical and Research Reports," which will appear monthly beginning with the January 1977 issue. This section will include reports on new clinical or laboratory observations, single cases of unusual interest or importance, descriptions of preliminary studies, and well-developed suggestions for future research. Reports should not exceed 1,000 words and may contain at most 1 table and 8 pertinent references (figures will not be used). Submissions will be reviewed by at least one referee and the Editor. It is anticipated that the publication lag will be considerably less for Reports than for other articles in the *Journal*. Submissions are welcome immediately; authors will be informed by postcard of the disposition of their papers.

Reports should be submitted in duplicate, double-spaced, with tables and references typed on separate sheets. The designation "Clinical and Research Reports" should appear in the upper right corner of the title page, and complete addresses and affiliations, as well as a telephone number of the author designated to handle correspondence, are required.

Can Program Evaluation Be Saved from Its Enthusiasts?

BY JACK ZUSMAN, M.D.

Program evaluation—the use of scientific techniques to measure the value of an agency's work—has become the focus of major attention and enthusiasm in mental health service planning and administration. However, the author points out that completed program evaluation studies are few in number and provide no evidence of great impact on the operation of programs or agencies and that unrealistic enthusiasm for program evaluation can lead to unrealistic rejection when performance fails to reach promise. He concludes that program evaluation should be applied only when it can have an impact, i.e., in a limited number of carefully selected cases.

PROGRAM EVALUATION—the use of scientific techniques to measure the value of an agency's work—has become a major concern on the current mental health service scene. Evaluation of every mental health service program is increasingly coming to be looked on as essential in order to maintain public support and as a means of budgetary salvation when costs are increasing and available funds are decreasing.

Top-level government officials seem to encourage widespread use of program evaluation without reservation (1). Proponents of the community mental health center movement have suggested that program evaluation studies will be one of the most important means of convincing the public that centers are doing their jobs (2, p. 5). At least one state, California, has enacted a law requiring program evaluation of state-supported mental health service programs (3). New York State has several provisions in its mental hygiene law that support program evaluation, although they do not clearly require it (4). New York also has a unit that includes program evaluation among its statewide responsibilities (5).

There is a strong movement toward requiring program evaluation of every federally funded service (6, p. 15). Mental health centers now quite commonly have evaluation specialists or units within their organizations or as consultants. There are major federal efforts under way to popularize the evaluation concept and spread information about the usefulness of and techniques for evaluation, including publication of the journal *Evaluation*, sponsoring of a national conference on the subject in 1974, and publication of resource materials (7). Not surprisingly, administrators of mental health programs are under pressure to evaluate all aspects of their programs; few new programs are designed without "built-in evaluation." One author (8) has even called evaluation (in an at least semi-serious vein) a "panacea."

Program evaluation itself has thus become a major element of programs, one that is usually instituted with great enthusiasm and prediction of important effects. However, the fact is that response to results of completed program evaluation studies is often honored more in the breach than in the observance and for a very good reason: program evaluation studies have so far demonstrated little of value to mental health service administrators or, for that matter, to administrators in any of the social welfare fields and are unlikely to do so for some time to come.

Indeed, in view of numerous reports of the failure of various governmental efforts at service evaluation and quality control in other areas (9–13), it would seem that the burden of proof ought to be on anyone who predicts that mental health program evaluation studies will be effective in improving service. (Although many reports of failure of governmental evaluation and enforcement efforts are journalistic and almost none meet any sort of standard for a scientific investigation, they nonetheless make up an imposing collection. The references provided here represent only a fraction of those which could have been listed.)

There are several fundamental reasons for the lack of accomplishment of program evaluators and program evaluation studies so far (14, 15). In view of the tremendous fanfare that has been generated by program evaluation, it is essential to examine this situation with care.

THE PROGRAM EVALUATION PROCESS

Many definitions of program evaluation exist (16–18), but the essential element, whatever the definition, seems to be the use of scientific methods to examine the work or accomplishment of an agency in relation to an agreed on set of standards. The agency's work may be examined in a number of ways and at a number of points in the work process. One convenient manner of categorizing evaluation approaches is that offered by

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Donabedian (19), which was later applied specifically to mental health services by Zusman and Ross (20). Donabedian divided evaluation into examination of structure, i.e., working tools of the agency, such as office space, staff, record keeping, and administrative procedures; process, i.e., interaction between staff and patients; and outcome, i.e., eventual result of the service provided.

Outcome evaluation is in a sense the best measure because it answers the question of whether the service did any good for the patient. However, because outcome is the most expensive, complicated, and long-term form of program evaluation, it is often more practical to study structure and process. The latter two approaches are based on two assumptions: that good structure and process in a program will lead to good outcome—often a very tenuous but commonly accepted assumption—and that experts are able to agree on and specify accurately the characteristics of good structure and process.

Scientific methods are used in program evaluation, but the process begins with quantifying the nonscientific values and goals implicit in an agency's work. These values and goals arise from political, ethical, and moral beliefs. As a neutral method for discovering facts, science has no place in this most basic aspect of evaluation; therefore, evaluation is at best only partially a scientific activity.

Selecting goals of an agency or program against which its accomplishments will be measured may be done through obtaining consensus among professionals; studying desires of the individuals served by the program; responding to wishes of the political leaders who ultimately control the agency's budget; a combination of these; or any number of other possible mixtures of sociopolitical forces. Selection of the particular goals, which are not necessarily congruent with the work the agency is prepared to do or actually is doing, can determine even before the study is undertaken whether it will show negative or positive results (21, p. 258). By choosing a goal impossible for the agency to attain or one that unquestionably has already been attained, the evaluator or administrator has the power covertly to control a result that will seem to emerge independently from data analysis months or years later.

It is important to distinguish the form of program evaluation under discussion here from two other kinds of activities commonly confused with it. Management information, which has also been called "effort evaluation" (22, p. 37), is accounting and analysis of such everyday administrative items as patient flow, agency income and expenditure, and staff time use. Whereas program evaluation measures accomplishments against a set of goals, involves acceptance of a number of untested assumptions, and often does not produce information until long after the service has been completed, management information simply provides value-free statistics regarding current service demands and resource use within the agency. A management information system is an essential part of every agency administration because it enables the program manager to monitor and control his or her staff. It is not program evaluation, in that it measures only the "spinning of the wheels" and does not indicate anything about quality or accomplishment. On the positive side, however, management information costs very little beyond the cost of regular agency operation, requires little in the way of trained staff to produce, and is simple to understand and respond to.

The second activity to be distinguished from program evaluation is "rapid informal evaluation" (23), or quality estimation. (There is no commonly accepted term for this activity; little has been published about it.) Informal evaluation of service quality is carried out by every professional considering and improving his or her own work and the work of other professionals with whom he or she is in contact. We all have our own standards of care developed over our years of professional experience. When formal evaluation of a program is yet to be done, these standards often can and should serve as guides for service improvement.

Many lapses in service quality do not require elaborate studies to pinpoint them. Brief, informal observation serves as well (24, 25). A common failure has been to assume that service quality cannot be studied or improved without formal program evaluation. Nothing could be farther from the truth. Informal quality estimation, like management information, must be part of every administrative operation. It too is inexpensive, easily and quickly done, and simple to respond to. Its major drawbacks are its lack of public, easily stated standards and the arbitrariness behind the standards.

STUDIES AND EXAMPLES

Program evaluation studies in mental health have thus far accomplished little, in part because few have been completed and reported. However, a small number of studies has been reported whose effects can be examined as examples of what the impact of a program evaluation study can be. In addition to these examples, a number of episodes of evaluation-type incidents in mental health and related fields are similar enough in effect to formal evaluations to be looked on as suggestive of difficulties that program evaluation studies will encounter.

Among the success stories of the impact of a positive program evaluation (limited though the success may have been) has been the demonstration by several investigators of the effectiveness of brief psychiatric hospitalization for severe mental illness in contrast to the debilitating effect of prolonged hospitalization (26). Although there was never any crucial single study of this phenomenon, beginning in the late 1940s there were a number of clear demonstrations and "experiments of nature" that provided strong evidence (27–30). The use of brief rather than long-term hospitalization has spread widely on the basis of re-

peated formal and informal evaluations. Unfortunately, these evaluation reports have not themselves been completely successful in that application of their findings has often led to serious social and political problems (31–33). Possibly this is because the original practices that were demonstrated to be effective were only incompletely duplicated in subsequent situations. In addition, evaluation findings have been ignored by some planners and administrators who were either unaware of them or did not accept them (34). Appropriate use of evaluation study results, therefore, has not been overwhelmingly demonstrated in this instance.

Another possible success story of program evaluation has been the demonstration of the effect of community mental health centers in decreasing the number of state hospital patients in the United States (35, p. 17). Demonstration of the effectiveness of the centers and the consequent general acceptance of the center concept by planners and administrators has been clouded by cutbacks in funding for the centers. These cutbacks might even possibly lead to the centers' eventual demise. Interestingly, funding cutbacks are sometimes explained as resulting from the centers' demonstrated success and at other times as resulting from the centers' demonstrated lack of success. An official publication of the National Institute of Mental Health (36) pointed out that the remarkable decline in number of state hospital patients began before the centers were established, and other reporters looking at the same data (37) questioned whether they really show effectiveness of mental health centers at all.

The failures of good program evaluation studies to have any impact on subsequent programs are far more numerous than the successes. Fairweather and associates (38) reported a number of studies showing the effectiveness of moving state hospital patients as a group into the community in preventing rehospitalization and relapse. However, they were unable to induce psychiatric hospitals in the United States to institute this innovation in spite of the fact that they offered a variety of encouragements and free consultations (39).

Pasamanick and associates (40) showed how the use of visiting nurses could alleviate the need for most mental hospitalization and thereby save money and lower patient morbidity. However, their program has apparently not been tried as an alternative on a substantial scale anywhere else in the country.

Negative evaluation studies, i.e., studies showing that a program does not accomplish its goals, seem almost never to have any impact on the particular program studied or on the field in general. Programs that have been negatively evaluated and yet have not generally changed include suicide prevention centers (41, 42), crisis intervention programs (43), social casework services (44), mental health education (45), and vocational rehabilitation of ex-mental hospital patients (46).

A situation very analogous to a formal negative evaluation and suggestive of the problems in implementing negative evaluation findings was seen in the nursing home scandal in New York State. Practically every public official and citizens' group that examined this situation agreed that conditions in many nursing homes in New York State were terrible (47, 48), but, despite the best efforts of the state government, it has not been possible several years later to bring about change (49, 50). It seems quite likely that other serious efforts by government to close or change mental health agencies found through formal evaluation studies to be performing inadequately will also be met with injunctions, lawsuits, and public countercharges.

A very striking aspect of the contemporary mental health scene is that evaluation studies so far have been limited to minor programs and fairly minor aspects of major programs. Major service programs that eat up large sums of money and on whose financial and political health many professional careers depend have never been evaluated; apparently, no efforts are under way to do so.

For example, the community mental health center movement has been in existence long enough and there is a sufficient number of mental health centers that major evaluation studies of centers as a whole and of each of the "essential elements" of a center ought to be possible. Almost none seems to have been reported, however. The research grant program of the National Institute of Mental Health has never been seriously evaluated either, in spite of the great hopes repeatedly expressed for it and the millions of dollars that have been disbursed through it. In addition, few of the various forms of psychiatric treatment have been evaluated, and these only on a very small scale and to a limited degree. There is still no generally used or accepted information available about which forms of psychiatric treatment, if any, are effective with which types of patients. There seems to be little clamor for evaluation in these areas, and the programs go on very well without it.

An observer might be led to the conclusion that top-level policy makers and professional leaders are concerned with evaluating only those programs which can be easily dispensed with. Large-scale programs are too serious a matter to be left to evaluators. When governmental or quasigovernmental inspection or evaluation of large-scale expensive programs has been attempted, it has not been uncommon for such evaluation activities to be seriously underfunded for the magnitude of the job involved and, sometimes, for the groups being evaluated to exert undue influence in one way or another over the evaluators (51–55).

Thus, despite the great hopes for evaluation and much lip service given to its importance, it seems that so far evaluation has accomplished little and that there is no sign of a future change in course.

PROMISE AND PERFORMANCE

There are several reasons for the disparity between the great promise offered in theory by evaluation and

the actual performance. When taken seriously, evaluation studies represent a major threat not only to professional careers but also to the stability of highly cherished beliefs and world views. The possible effects of a strongly negative evaluation on professionals include a change in employment and, possibly, career as well as a need to discard long-held theories of behavior without the immediate prospect of satisfactory substitute theories. What are we left with when a therapeutic procedure that simply *has* to work because all of our theory tells us it will turns out not to work? If we cannot discredit the evaluation or sharply limit its generalizability, we have a void in our framework for understanding the world.

The most comfortable solution to this stress is to ignore the meaning of the evaluation or, better still, never to do an evaluation. The history of any area of intellectual study shows repeated instances of man's capacity for self-delusion and for ignoring theoretically inconsistent and therefore uncomfortable facts (56, 57).

Even individuals who are not emotionally or professionally tied to a particular program or point of view are difficult to persuade by means of evaluation studies. Most of these studies are complicated, and their interpretation depends on sophisticated statistical and epidemiological techniques. Thus they are neither easy to understand nor easy to explain. Furthermore, when the evaluated program is dear to professionally competent individuals, they almost always attack the evaluation study on technical, methodological grounds. The battle between this group and those who defend the study soon becomes understandable only to a small group of experts.

Controversy surrounding the "Coleman report" (58) and the University Group Diabetes Program (UGDP) study (59) are good examples of this kind of battle. The former was an investigation of the effects of school segregation on school performance. Almost 10 years after its completion and after the publication of perhaps hundreds of articles and several books devoted to its examination, it is still not clear how reliable, valid, or generalizable the original study was. The UGDP study of the effects of oral antidiabetic drugs, which involved a number of major medical centers, has required several reanalyses of the data and is still mired in controversy. It may be "settled" in court. In cases such as these, in which experts cannot agree about the meaning of an evaluation study, how can a political leader or intelligent citizen be expected to make up his or her mind?

There are several other reasons why evaluation studies can never have more than a slight impact on the development of services. The budgeting of public agencies (in the current situation, most private and voluntary agencies actually depend in large part upon public support) is very much a political process. A budget allocation is usually the expression of pressures from a wide variety of sources funneling into "the final common pathway" of a monetary appropriation (60). All sorts of groups (e.g., professionals in the program, clients, local citizens, and businessmen trading with the agency) have vested interests in the well-being of an agency and the magnitude of its programs. The results of an evaluation study—even when clear-cut—can be but one minor pressure in the decision-making process. Even then, the evaluation study will have an effect only if some person or group in a position of power wishes to make use of the results. Evaluation studies obviously do not speak for themselves—their results must be disseminated somehow. Evaluators are in no political position to act as advocates for their studies because if they did so they would not likely have an opportunity to be evaluators again. If evaluation studies can only be a minor factor when results are clear-cut, how much less effective are they likely to be when results are controversial or not easily understood?

It is often assumed that even though citizens and political leaders may not easily understand or react to evaluation studies, the professionals whose work is under scrutiny will surely do so. The assumption is that all that needs to be done to improve professionals' work is to inform them of poor results. Many programs involving immediate feedback of evaluation results to administrators and clinicians are based on this assumption (61). Systematic evaluation (as contrasted with uncontrolled studies or testimonials) of the effectiveness of this approach seems lacking. Even in principle there is a question about how effective this process could be. What is the incentive for a professional to respond to a negative evaluation?

Although professional ethics and pride in our work are presumably encouragements to all of us to do the best we can and to change our ways when a study shows we are being ineffective, we are all under many strong pressures to keep doing things the way we have been doing them.

When the results of a negative evaluation study become known outside of an agency or profession, what is the incentive to the political leader or the private citizen to urge the agency to improve? No more than a small fraction of the total expenditure of tax funds is going to the agency; if a portion of those funds is being wasted, how much of a loss is it to any individual taxpayer? It seems naive in view of all that is known about political behavior to expect that evaluation studies are going to be a force leading to major improvement.

HAZARDS OF OVERENTHUSIASM

If evaluation studies are not the panacea that we have been told they are, what is the harm in describing them enthusiastically or expressing unrealistic hopes as fact? A good deal of harm can result from this kind of misguided enthusiasm.

The mental health fields have been beset by a series of fads in the last few years to the point where profes-

sional leaders seem to be rapidly losing credibility with politicians. Where once it took no more than a brief appearance before a legislative committee to open the funding floodgates, budgetary requests from mental health service agencies are clearly being examined very carefully now and being cut back without hesitation. In part this seems to be because programs that were recommended enthusiastically have turned out not to live up to their promise. It would be unfortunate to add program evaluation to this group.

Program evaluation costs money—when properly done, a great deal of money. Five to ten percent of the budget of a service program is sometimes talked about as a realistic amount to be devoted to evaluation. This amount is perhaps sufficient for a management information system but certainly not for an adequate evaluation. In a relatively small program, an evaluation unit can cost as much as the service program itself (61). To attempt to fund a large number of evaluation studies inadequately not only serves to waste much of the funds but is likely to prevent any studies from receiving enough funds to accomplish anything at all.

Finally, there is the important problem of a shortage of trained evaluators. If evaluation is to consist of more than simply collecting anecdotes from satisfied patients, evaluators must be trained in a wide variety of epidemiological, statistical, sociological, and administrative skills (62, 63). There are few training programs preparing individuals to carry out this work. There will not be a sufficient number of trained evaluators for many years to come to do evaluation work on the scale that has been talked about.

APPROPRIATE EVALUATIONS

In light of the difficulties mentioned here, when should evaluation be done? Obviously an evaluation study is worthwhile only when there is a likelihood or at least a good possibility that it will have an impact on the program evaluated and others like that program. Therefore, evaluation should be carried out only in a relatively small number of programs that are carefully selected (64). Each such program should be representative in all essential aspects of a general class so that results can be applied to a whole group of similar projects. The program should be easily describable so that it will be possible to replicate it without missing essential elements.

The program should be in its early stages or at least not so politically entrenched that a negative finding can be ignored with impunity. The program must be sufficiently malleable to make improvement possible.

The program should have goals that are related to the service it provides and that everyday observations suggest are likely to be attainable. An example of the disregard of this concept seems to be the suicide prevention centers, which contact only a small fraction of the individuals in the community at risk of suicide and which actually seem to be crisis counseling centers. It is not surprising, then, that suicide prevention centers have little or no impact on suicide rates in the communities they serve. Were the goals of these agencies more appropriately stated, their evaluations would likely not be so negative.

Finally, the evaluation should be designed and carried out in such a way that it is understandable to the political leaders and the citizens who will have to act in support of its findings. The study should be well known to them and have their support well before research begins.

CONCLUSIONS

If the current widespread, unquestioning enthusiasm for evaluation continues unchecked, history suggests that evaluation will go the way of several other recent fads in mental health and social welfare services. Enthusiasm will reach a crescendo of excitement, then interest will simply fade away, and evaluation will never have been properly tested or appreciated as a method of program improvement. To save it from this fate it is necessary to set limits on what is attempted in the name of evaluation and to err on the side of caution in predicting how useful evaluation studies will be. Program evaluation is potentially too important to be left to an unplanned demise.

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Cancer, Emotions, and Mental Illness: The Present State of Understanding

BY FRIDA G. SURAWICZ, M.D., DENNIS R. BRIGHTWELL, M.D., WILLIAM D. WEITZEL, M.D., AND EKKEHARD OTHMER, M.D., PH.D.

The authors review recent and current literature on the relationship between psychological factors and cancer. They discuss the roles of predisposing personality patterns and emotional stress in the development, site, and course of cancer; the influence of awareness of terminal illness on the behavior of cancer patients; and the management of psychiatric symptoms in these patients.

THE LATTER HALF of the nineteenth century brought important progress in the discovery of the etiology and more accurate diagnosis of many somatic diseases. This progress resulted in an increased focus on cause-effect relationships and specific organ pathology. Twentieth-century medicine has been influenced by the impact of psychoanalytic thinking and by the metamorphosis of psychiatry from neurology's half-sibling into a separate and distinct medical speciality.

The coexistence of cancer and emotional distress has been noted by physicians for more than a century (1). Whether this association is described at length and in detail or only fleetingly mentioned seems to depend to some degree on whether the clinician regards the body and mind as a whole or as a dichotomy. Psychiatry's increased stature within medicine and its widened data base have reawakened awareness of body-mind unity. Regrettably, this has sometimes led to excesses in the interpretation of causative factors for somatic disorders, including cancer.

The medical literature of the 1950s and 1960s abounds with papers describing cancer as yet another psychosomatic disease, either precipitated by arrested personality development or preceded by specific emotional distress (2–11). In retrospect, one cannot help but feel that insult was added to injury by suggesting to cancer patients that immature personality development or a real or symbolic loss precipitated their malignant illness.

More recent literature has focused on rehabilitation for people with chronic or terminal diseases through improved adaptation to the emotional distress that accompanies such illnesses. Emotional distress in this conceptualization is viewed more as a response to than as a cause of illness (12–19). Preliminary studies in endocrinology and immunology are rekindling interest in stress as an etiologic agent for neoplastic disease (20).

EMOTIONAL STRESS AND CANCER

Is there evidence that emotional stress or psychodynamic conflict provokes or contributes to the development of neoplastic disease? A variety of hypotheses have been offered on this subject. Tarlou and Smallheiser (2) compared women with breast cancer and cancer of the cervix and concluded that women with oral conflicts developed breast cancer, whereas women with genital conflicts developed cancer of the cervix. Bacon and associates (3), after observing 40 women, felt that breast cancer could be conceptualized as passive suicide precipitated by guilt feelings and depression. Reznikoff (4) raised the question of hormonal imbalance secondary to psychodynamic conflict when he compared women with benign and malignant breast lesions and found an apparent disturbance in feminine identification and a history of excessive re-

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sponsibilities during childhood in the group with malignant breast lesions. After psychoanalyzing 5 women with a history of breast cancer, Renneker and associates (7) suggested that there is an association between breast cancer and a disturbance of heterosexual impulses characterized by increased oral-dependent needs following disturbed object relationships. Booth (11) concluded from his work that a neoplasm involved the organ most specifically related to the frustrated psychophysiological object relationship and suggested that cancers developed as internalized substitute objects.

The concept presently known as life change units was first introduced by Greene in 1956 (5, 6). His data indicated that there was evidence of significant losses shortly before onset of leukemia and lymphoma in an overwhelming majority of the children and women that he studied. He reported that a majority of mothers of children with these disorders had been depressed and/or anxious for weeks or months prior to the onset of the child's disease. Renneker and associates (7) also reported depressive reactions prior to the onset of cancer and speculated about the possibility of decreased host resistance due to depression. More recently, Schmale (9; 10, pp 629–631) reported that cancer seems to develop in patients who report "giving up" and feeling severe hopelessness. This author suggested that giving up is a nonspecific factor that requires the existence of a neoplastic predisposition for the disease to develop. LeShan (8) summed up a consensus of many authors when he suggested that a major emotional loss precedes the development of neoplasm and raised the hypothesis that there might be a relationship between personality organization and the site of the neoplasm.

The concept of a precancerous personality or the suggestion of significant losses contributing to the development of cancer has received little attention in more recent literature, with the exception of recently published prospective studies by Thomas and associates (21–23). Her data indicated that several nonspecific personality factors correlate with the subsequent development of several illnesses.

Grissom and associates (24), in a comparative study of healthy subjects and patients with bronchial carcinoma or emphysema, found no significant difference in life change units but did report that cancer patients achieved a lower personal integration score on the Tennessee Self-Concept scales. He suggested that these individuals might have had distinct personality characteristics prior to the onset of illness. Laxenaire and associates (13) studied 80 cancer patients and concluded that there are no good data to support the theory of a specific precancerous psychological state. Finn and associates (25) found that anxiety is a common denominator of both coronary and cancer patients but that no other psychological traits distinguish these groups. Finn concluded that overriding anxiety may make it impossible to study the basic personality prior to onset of disease in these patients.

EMOTIONAL FACTORS AND THE COURSE OF NEOPLASTIC DISEASE

If it is true that stress and/or depression predispose to cancer, then there should be a relationship between degree of stress and severity of cancer. In 1954 Blumberg and associates (26) compared patients with slow-growing and rapid-growing cancers and speculated on the existence of host resistance in the first group. Such patients were variously described as manifesting normal behavior, conversion hysteria, acting out, and psychosis. Patients with rapid-growing cancers were described as characteristically suffering from anxiety and depression. Stavraky and associates (27) studied the progression of cancer and reported that patients who combined above average IQs with hostility had a more favorable prognosis. These findings conflicted with those of Laxenaire (13), who was unable to establish a relationship between the patient's level of emotional distress and the rate of progression of the cancer. More recent literature does not reflect continued interest in these speculations.

AWARENESS OF CANCER AND PSYCHIATRIC SYMPTOMS

It is possible that nineteenth-century physicians misunderstood the proper temporal relationship between melancholia and malignancy and thus saw depression as a concomitant feature of malignancy rather than as a reaction to it. Contemporary authors do not describe specific precancer histories or personality dynamics, but instead write about the reactions of patients to their illnesses. Laxenaire described intense anxiety and suicidal preoccupation (without any reported suicide attempts) as the initial response to the diagnosis of cancer (13). Bronner-Huszar (17) described anxiety as a frequent first response that in some cases led to delay in obtaining surgery because the patient denied the illness.

Anxiety is commonly followed by depression after hospitalization; one investigator found signs and symptoms of clinical depression in one-fifth of all severely ill patients studied but did not elicit suicidal tendencies or positive family histories of previous depression (28). Craig and Abeloff (29) reported high levels of depression in one-half and elevated levels of anxiety in one-third of cancer patients. Twenty-five percent of his patient group had some psychiatric signs and symptoms comparable in severity to those of patients seen in psychiatric emergency room situations. Hinton (18) reported finding the following symptoms (in descending order of occurrence) among 50 patients with diagnosed terminal illnesses: depression, anxiety, confusional states, phobic states, and manifestations of personality disorder.

To place these findings in perspective, it is important to note that one study (30) found that one-half of all patients referred for psychiatric consultation in a

general hospital suffered from depression. Feifel and associates (31) found that patients in whom death was imminent, regardless of their diagnosis, were more fearful of death than were healthy controls. Finn (25) found high anxiety profiles in both coronary and cancer patients.

Patients diagnosed as having cancer must employ coping defense mechanisms to remain in treatment and/or to achieve rehabilitation. Schonfield (14) reported a significant correlation between the ability to return to work and high scores on the MMPI well-being scale; successfully treated cancer patients also had lower scores on the morale loss scale. Bronner-Huszar discussed the phenomenon of continued invalidism in cancer patients and urged physicians dealing with them to pay attention to underlying psychological factors (17). Laxenaire placed great importance on mobilizing family support and increasing the likelihood of early return to employment as a means of effectively dealing with high levels of anxiety (13). Such an approach has led to an increased number of successfully rehabilitated patients.

Reports describing reactions of cancer patients to their diagnosis focus primarily on anxiety and depression or a combination of the two. The work of Kübler-Ross (12) explains the behavior displayed by patients who are terminally ill in terms of an adjustment to the dying experience. It is notable that this author does not regard the coping reactions of cancer patients as different in any significant way from those of other terminally ill patients. The question of whether cancer produces unique reactions deserves further investigation.

TREATMENT OF PSYCHIATRIC SYMPTOMS IN CANCER PATIENTS

A distinction between studying cancer patients and treating them must be made. Many of the papers of the 1950s evaluated patients by means of a series of tests (2–6, 26), but their treatment was not discussed. Renneker (7) suggested psychotherapy for patients in whom psychiatric evaluation disclosed a decompensating neurotic system. Treatment in these cases would be aimed at the replacement of object-fixated and frustrated drives with new sublimatory outlets. It should be remembered that psychoanalysis and psychoanalytic psychotherapy were the treatments of choice in the 1950s.

Contemporary clinicians have a much broader therapeutic arsenal at their disposal. Some questions asked by physicians who treat patients with cancer involve whether or not the patient should be helped to face the existential crisis involved in the recognition of terminal illness and death. If the physician believed that the patient should be helped to face death, pharmacological aid would be used conservatively. (The emotionally charged and controversial topic of whether to artificially prolong life does not seem to have the same relevance and intensity when discussed in terms of terminal cancer patients.)

Craig (29) strongly suggested that psychotropic drugs should be used to alleviate both anxiety and depressive symptoms. Bronner-Huszar (17) recommended judicious use of tranquilizers and antidepressants if a mental status examination indicates that psychopathology is not caused by electrolyte imbalance or drug side effects. Hinton (18) reported that he treated patients with terminal illness with psychotherapy, tranquilizers, and/or antidepressants. Kahn and Zarro (19) also suggested psychotherapy and selective use of medications for the management of terminally ill cancer patients, and Laxenaire (13) emphasized the involvement of the physician as well as the family in the management of these patients. Such involvement is not without its price, since the management of terminal patients places heavy demands on the physician (32). LSD has been prescribed for use with terminal patients (33). Recent literature has emphasized the physician's obligation to try to give support and comfort to patients suffering from any terminal illness, including neoplastic disease.

DISCUSSION

Early studies tended to search for specific personality types, defined in terms of psychodynamic variables, associated with specific cancer types. Difficulties with this approach resulted from the lack of carefully designed longitudinal studies (34). In addition, most studies did not have control groups; the few that did used poorly matched controls. In many cases the authors failed to consider the impact that having cancer might have on an individual's answers in an interview or on psychological tests. In the absence of control groups, one cannot assume that these answers were the same as those the patient would have given prior to the diagnosis of cancer. As more carefully designed studies have been carried out, the concept of a specific carcinogenic personality has not been supported.

While the search for a specific personality associated with cancer so far has come to a dead end, there does appear to be some association between the course of illness and several nonspecific personality factors. Perhaps individuals with certain personality traits adapt poorly both psychologically and physiologically to any of several diseases and syndromes (35). Recent investigations have been concerned with emotional and behavioral reactions after the diagnosis of cancer has been made. It seems clear that depressive symptomatology is common, but the treatment of choice, if any is even indicated, has not been established.

There continues to be much interest in the relationship of emotional symptoms, psychiatric disease, and the onset and course of neoplastic disease. Final understanding continues to elude us. We do well to remind

ourselves that all illnesses have both physiological and psychological components. If one acknowledges the unity of body and mind and remembers that man is a member of a family and society, one easily recognizes the wide repercussions that terminal illness has. Such an awareness requires the physician not only to treat the cancer process per se, but also to mobilize and involve the patient and his family in the successful confrontation with this final life crisis.

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Trends in Hospital Versus Community Treatment of Mental Illness: A Texas Example

BY JAMES L. CLAGHORN, M.D., GEORGE W. MCBEE, PH.D., AND LINDA ROBERTS, M.A.

The authors present statistics from Harris County, Tex., that indicate community psychiatry is making progress toward its goals of decreasing inpatient hospitalization and increasing services to the community. At the present ratio of services, a 30%–40% increase in outpatient services could theoretically eliminate the inpatient system. The authors stress the fact that inpatient facilities are still vital and offer directives for the future roles of the hospital and of community psychiatry.

SINCE THE INCEPTION of the community mental health movement in the early 1960s, mental health professionals have continued to search for methods to provide optimum patient care. While all agree that long-term hospitalization, custodial care, and huge institutions belong to a dark antiquity, heated polemics erupt among professionals concerning the issue of the psychiatric hospital. Those who support the community movement point to the dehumanization and ineffectiveness of traditional hospital treatment and demand the abolition of such institutions. Equally adamant are those advocates of the "patient's right to be a patient" who defend the hospital and the medical model in psychiatry (1). Others take the middle-of-the-road position that we should integrate community and hospital programs to develop a unified human services system (2–4).

In keeping with the promises of the community movement, mental institutions have experienced reductions in both capacity and admissions. Unfortunately, a scarcity of data exists on the relationship between these reductions and the use of community programs. A study conducted at the Prairie View Mental Health Center in Kansas (5) showed a significant decline in state hospital admissions attributable to services delivered by a comprehensive community system. However, an investigation in San Antonio, Tex., revealed an increase in the number of admissions to the state institution in a catchment area in which community services were available (6). The latter results must be viewed from a different perspective since the community and hospital services were integrated in a comprehensive program and the community center served a patient population that far exceeded the capacity of the hospital alone.

Another concern that has evolved during this era of community psychiatry is whether the system can adequately reach and treat the population in need of services. Two studies done in the early years of community psychiatry attempted to assess the mental health of general populations. The Midtown Manhattan study (7) examined the nature and prevalence of symptoms of mental illness in relation to socioeconomic status in an urban area, and the Stirling County study (8) investigated symptoms of mental illness in relation to the individual's integration into a rural community; data from both projects revealed that approximately one-third of their populations exhibited major symptoms. Community service systems have not yet reached their projected capacities. But in the face of this great potential need, efforts seem futile and present systems seem hopelessly inadequate; the professional is besieged by doubts that present and planned mental health facilities can provide the care necessary.

At its inception the community mental health model was looked upon as a modern, humanistic approach to treatment that would eventually close traditional institutions and provide comprehensive services to the entire population in need. At present some of the problems in achieving optimum patient care center about these issues—i.e., the ability of community programs to deliver adequate services, the future of the psychiatric hospital, and the relationship between reductions in state hospital admissions and the use of community facilities. An examination of recent trends in public hospital and outpatient treatment based on statistics from Harris County, Texas, elucidates some aspects of these problems and suggests directions for the future.

TREATMENT TRENDS IN HARRIS COUNTY

Population growth in Harris County has been great and is expected to continue at the present rate. The treatment trends that we will discuss have been occurring during this growth phase; therefore, little change is expected in them in the coming four or five years. Of course, the rate of population growth is subject to economic and social influences and may unexpectedly in-

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FIGURE 1
Number of Public Inpatient Psychiatric Beds Used Nationally from 1955 to 1971, and Possible Future Trends

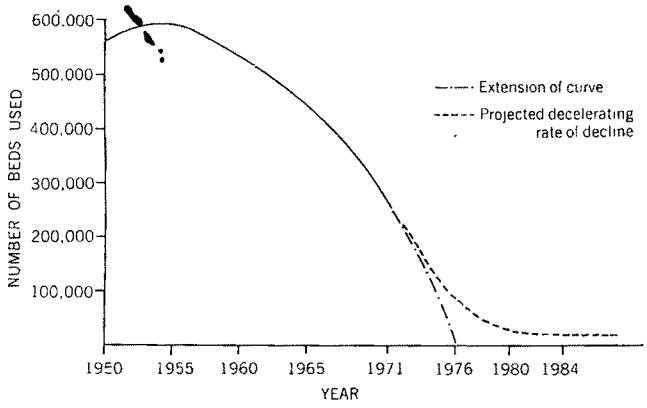
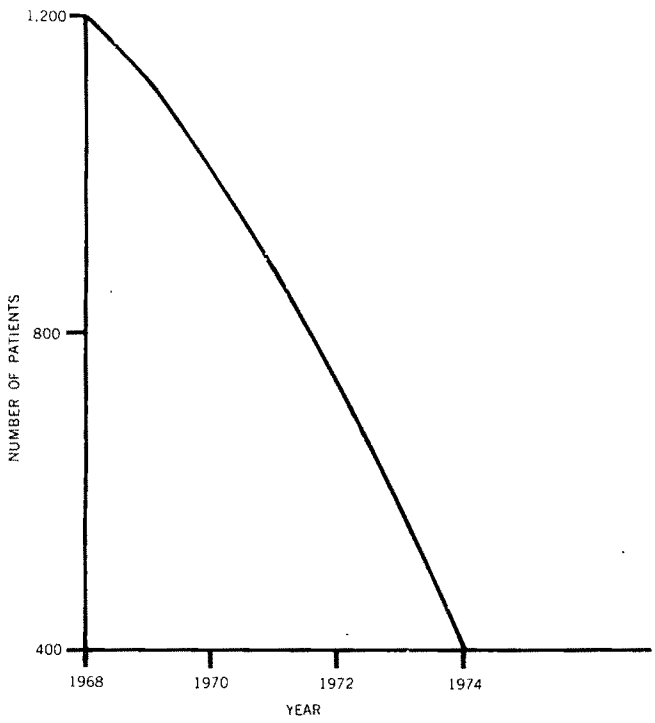


FIGURE 2
Number of Public Psychiatric Inpatients in Harris County from 1968 to 1974



crease or decrease, but an analysis of recent trends can still be instructive and beneficial in planning.

Since 1955, the number of public beds used by psychiatric inpatients nationally has been declining at a rate that has increased from 3% in the first years to 10% in 1971 (9). Figure 1 shows the rate of this decline. If the curve is extended without inflection it reaches a baseline of 0 in 1976; if we assume a decelerating rate of decline, the result is a reduction in bed need to some irreducible minimum.

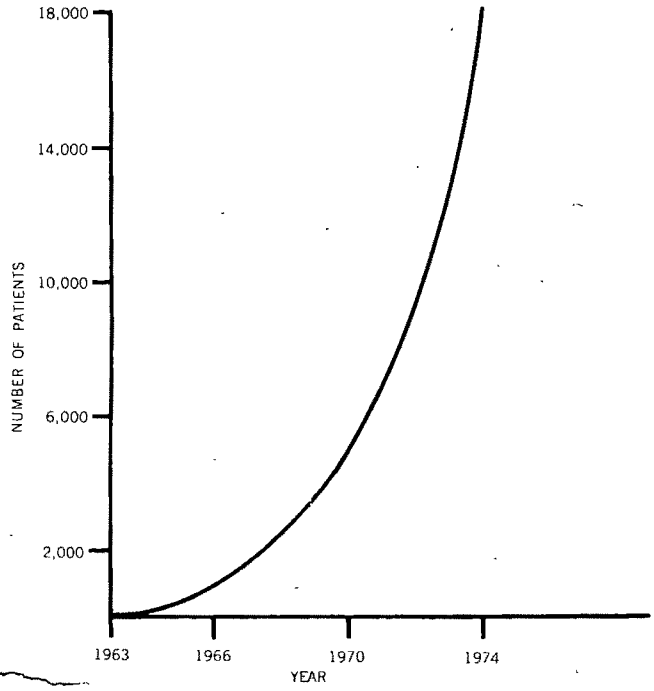
A 10% annual rate of decline was also noted for Texas in a report made in 1974 (10); this rate also applies to the Harris County unit of the Austin State Hospital. Figure 2 illustrates this decline in the number of Harris County inpatients from 1968 to 1974. In 1968, when the geographic units of the Austin State Hospital were formed, the Harris County unit had a capacity of approximately 1,100 patients. The Jefferson Davis Hospital and the Texas Research Institute of Mental Sciences in Houston jointly provided a few more than 100 additional beds, a number that has remained relatively constant since that time. By contrast, the number of inpatients in the Harris County unit of the Austin State Hospital has declined to approximately 300. Thus the average number of hospitalized psychiatric patients from Harris County recently totaled about 400—an admissions rate that is slowly and continuously declining.

Community services began at the Texas Research Institute of Mental Sciences in 1963 with 300 outpatients referred from the Austin State Hospital. This clinic has grown steadily and has been joined in its effort by the Mental Health and Mental Retardation Authority of Harris County. In 1974 this community program had a total outpatient capacity of approximately 18,000 patients; figure 3 illustrates an approximate growth rate for outpatient treatment. This rate must be considered approximate for several reasons: reluctance by the clinics to inactivate files of patients who missed appointments or lost contact with them, difficulties in using comparable measures (e.g., whether only those patients who are active at the close of the year, or all patients who have been active during the year, are counted), and a lack of communication among the clinics which may cause one person to be considered active by more than one clinic. These problems usually lead to an overestimation of clinic population.

Allowing for some overestimation of the size of the population treated, it can be seen by comparing figures 1 and 2 with figure 3 that the growth rate for outpatient treatment is nearly reciprocal to the decreased rate of inpatient care. The rate of outpatient growth is about 20 times that of inpatient reduction; that is, 15–20 outpatient service units will absorb 1 hospital service unit. If this ratio is applied to the recent total Harris County census of 400 beds, an interesting projection can be made: 6,000 to 8,000 additional outpatient service units—an increase of 30%–40% over current levels of service—might eliminate the entire inpatient system.

While this projection is entirely theoretical, it indicates that community mental health programs in Harris County are progressing favorably and that community psychiatry is fulfilling one of its purposes in assuming the care of patients who previously required hospitalization. Furthermore, outpatient facilities are delivering services to many more clients than was possible before community programs were instituted. In 1968 hospital capacity was at a maximum of 1,200 patients; outpatient services are currently received by 18,000 clients. These numbers demonstrate the sys-

FIGURE 3
Number of Public Psychiatric Outpatients in Harris County from 1963 to 1974



tem's potential to reach and treat the population in need.

NEED FOR A COMPREHENSIVE SYSTEM

General directives for the future of community mental health can be drawn from the representative trends shown here. The surprising projection that all hospital beds could be eliminated by a moderate escalation of outpatient services underscores the need for continued growth of community facilities. Steady increases in outpatient services would raise the size of the population treated; if carried out modestly and at regular intervals, these increases would comply with budgetary restrictions. It is vitally important to maintain adequate levels of outpatient service since long waiting lists and undue delays would undoubtedly drive many patients back to the hospital.

Community services and hospital care should be well integrated in a comprehensive system. The psychiatric hospital is still vital to this system; intensive chemotherapy with severely disturbed patients is best administered in a medically supervised setting. The milieu and style of the hospital is changing and should continue to change. Long-term custodial treatment has given way to acute short-term treatment and prompt discharge. Ideally, this treatment should occur in small, community-based inpatient facilities.

Community mental health has effected many changes in psychiatric treatment. The system has already progressed significantly toward its goals but requires continued, conscientious planning to achieve its potential. For this reason research is crucial to the future of community psychiatry. However, a paucity of supportive data exists in this area. A concerted effort must be made to evaluate programs and to assess their therapeutic outcomes; this base of data is essential to the structuring of comprehensive community service systems.

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Who Gets Supervised? An Extension of Patient Selection Inequity

BY RODNEY W. BURGOYNE, M.D., SANDRA SANTINI, M.S.W., FRANK KLINE, M.D., AND FRED R. STAPLES, PH.D.

A study of 89 individual psychotherapy patients followed by 17 residents in a teaching clinic demonstrated that those presented for supervision significantly differed from the others in being younger, better educated, and better liked by residents and in having higher incomes and longer term treatment. The authors discuss the implications of these findings in relation to the inequity in service time and teaching emphasis that this selection allows.

THERE IS CONSIDERABLE evidence that psychotherapists prefer patients of the opposite sex who are young, attractive, verbal, intelligent, and successful (the YAVIS syndrome of Schofield) (1–3). Such patients are more likely to be offered longer treatment and to remain in it (4–7).

Like many other facilities, the Adult Psychiatric Outpatient Clinic of the Los Angeles County–University of Southern California Medical Center primarily serves middle- and lower-class patients. While psychiatric supervisors and residents apparently endorse the policy of providing relevant psychotherapy for the poor and unattractive, actual service lags behind the ideal. Resident psychotherapists arrange their own individual work load, may choose to see patients or not, and may choose the treatment modality. About one-half of all patients in individual psychodynamically oriented psychotherapy are regularly presented to a senior staff member for supervision. Thus residents make decisions about patients in individual psychotherapy at the following 3 stages of the treatment process: initial acceptance or rejection, whether or not to present the patient for supervision, and the type of disposition arranged for the patient when the resident leaves the clinic service.

The purpose of this study was to determine whether selection procedures similar to those operating at the initial selection/rejection decision also operate when trainees present long-term patients to supervisors and subsequently arrange further treatment for them.

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METHOD

Seventeen second-year residents completed a questionnaire on patients they had in treatment, indicating the type and duration of psychotherapy. Because the residents were to leave the clinic soon, they listed their plans for each patient's disposition. Residents could continue individual therapy with up to 3 patients, but the others were to be discharged, transferred, or referred.

All residents were then interviewed to determine the frequency of regular supervision for all individual therapy patients seen at least weekly for over 2 months. Additional information was obtained from a second semistructured interview regarding patients treated 9 months or more, and other information was gathered from charts and intake forms.

RESULTS

Residents provided longer treatment to patients whose psychotherapy was regularly supervised. Residents received supervision for 42% of 109 patients seen for 2 to 8 months, compared with 66% of 89 long-term patients treated for over 8 months. Table 1 compares data on the 59 supervised and 30 unsupervised long-term patients.

In spite of jokes to the contrary, female patients were no more likely to be presented to supervisors than male patients. In both groups twice as many women were seen as men, but with an equal proportion presented for supervision. Male patients treated by 3 female residents were always supervised, although their patient load was 85% female.

Differences in age, education, and income were related to supervision. Chi-square analysis revealed that significantly fewer of the older, less educated, and poorer patients received supervised treatment. Older female patients rarely had supervised treatment, and no one of either sex who had less than a high school education received any regularly supervised therapy. Patients diagnosed as psychotic were less likely, and those with personality and/or character disorders were more likely, to receive supervised psychotherapy.

TABLE 1
Comparison of Supervised and Unsupervised Patients in Long-Term Individual Therapy

Item	Supervised Patients (N=59) Number	Percent	Unsupervised Patients (N=30) Number	Percent	Chi-Square Value	Significance
DEMOGRAPHIC DATA						
Sex						
Male	19	32	10	33	0.0113	n.s.
Female	40	68	20	67		
Age (years)						
25 or younger	20	34	4	13		
26–35	31	53	15	50	8.1177	p<.02
36 or older	8	14	11	37		
Education						
Less than high school graduate	0	0	5	17		
High school graduate	13	22	14	47	19.1078	p<.001
More than high school graduate	46	78	11	37		
Income						
Less than $500 per month	26	44	22	73		
$500–899 per month	25	42	6	20	6.8567	p<.05
$900 or more per month	8	14	2	7		
RESIDENT'S ATTITUDE TOWARD THE PATIENT						
Found the patient appealing						
Yes	53	90	23	77	2.7628	n.s.
No	6	10	7	23		
Liked the patient						
Yes	48	81	19	63	3.4712	p<.06
No	11	19	11	37		
Felt involved with the patient						
Yes	42	71	13	43	6.5352	p<.02
No	17	29	17	57		
Believed the patient benefited from therapy						
Yes	53	90	28	93	0.2981	n.s.
No	6	10	2	7		
DIAGNOSIS						
Psychosis*	15	25	16	53		
Personality and/or character disorder	27	46	5	17	9.1396	p<.02
Other	17	29	9	30		
DISPOSITION PLAN						
Continue individual therapy	30	51	3	10		
Group therapy	8	14	8	27		
Refer to another therapist	1	2	2	7	19.2676	p<.001
Discharge	19	32	12	40		
Uncertain	1	2	5	17		
ACTUAL DISPOSITION						
Continued individual therapy	28	47	6	20		
Group therapy	10	17	10	33	7.7345	p<.06
Referred to another therapist	4	7	2	7		
Discharged	17	29	12	40		
PLANNED VERSUS ACTUAL DISPOSITION						
Actual same as planned	50	85	27	90	0.4704	n.s.
Actual different than planned	9	15	3	10		

*Schizophrenia and psychotic depression.

Whether or not residents found patients "personally appealing" people and whether or not they believed their patients "benefited" from psychotherapy were not correlated with supervision. However, a strong trend indicated that "liked" patients were more frequently supervised, and ongoing regular supervision was significantly related to residents' "feeling involved" with their patients.

Differences in plans for patient disposition were highly correlated to supervision. Residents planned to continue individual psychotherapy with half of the patients whose treatment was supervised, but with only 1 in 10 of the unsupervised group. Residents more often planned group therapy, referral, and discharge for the latter group and were more frequently uncertain about their disposition. Actual disposition was

very similar to planned disposition. Indeed, supervision did not significantly influence adherence to disposition plans. Except for those patients for whom plans were uncertain, actual disposition was almost always as planned.

DISCUSSION

Young, attractive patients who appear to have good ego strength, high education, and a good income are most likely to be selected for supervision. Other studies have indicated that residents treat patients who are similar to themselves (8, 9). Our survey demonstrates that this is even more true of patients presented for supervision. The generation gap influences which patients residents select for supervised treatment. They avoid men and almost totally exclude women over age 35. Thus the psychiatric problems of older groups are avoided at a crucial point in residency training. As the population moves toward older ages, skills to manage the problems of older patients are critically needed.

Supervision influences plans for patient disposition principally by encouraging residents to either continue more patients in individual therapy or discharge them rather than referring them elsewhere. This suggests that supervisors influence residents to believe that their supervised patients are special and should be continued in individual therapy or that they have finished their treatment.

Patients initially selected for individual psychotherapy are not representative of the general clinic population. Those selected for supervision are even less representative. Residents spend the majority of their time and most of their supervision on patients who least need treatment. They are best trained to treat the healthiest people, with less emphasis on skills required to treat the majority of patients. This type of selection may be one reason why so many practicing psychiatrists are reluctant to treat the sick and the poor, which in turn may be one of the reasons why federal and local funding agencies have become discouraged in their efforts to train and increase the number of psychiatrists.

Supervisors should make a conscious effort to encourage residents' interest in the so-called "less desirable" patients. This requires readjustment of some of their own goals and interests. It is not surprising that supervisors who have been primarily trained in dynamic psychiatry overvalue individual, long-term, dynamic psychotherapy (10). That is what they know and practice, and that is what they therefore prefer to teach. It is understandable, but unfair, when this attitudinal priority distills onto trainees.

It has been our experience that supervisors, when asked, can and do make necessary adjustments in their own value systems, call upon their long experience augmented with any necessary new information, and become more relevant and helpful in their supervision and teaching. This process requires continuing reinforcement from administrators, particularly when teaching supervisors are private practitioners who themselves treat patients from middle and upper classes. The effort required of all is amply rewarded by the increased relevance of supervision to the patient population.

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Studies of Adoptees from Psychiatrically Disturbed Biological Parents: III. Medical Symptoms and Illnesses in Childhood and Adolescence

BY REMI J. CADORET, M.D., LYNN CUNNINGHAM, M.D., ROSEMARY LOFTUS, M.S.W., AND JAMES EDWARDS, M.D.

Analysis of data gathered from interviews with adoptive parents supports the hypothesis that female adoptees of antisocial biological backgrounds might have higher percentages of somatic symptoms. The authors compared female adoptees of antisocial parentage with male and female controls, male adoptees of antisocial parentage, and male and female adoptees whose biological parents had other psychiatric conditions. They stress the importance of this hypothesis in the diagnosis and management of childhood and adolescent "medical" and behavioral problems.

IN PREVIOUS REPORTS (1, 2) we have presented behavioral findings from two groups of adoptees with different biological backgrounds. In one group (N=59) biological parents suffered from a variety of psychiatric conditions (experimental adoptees); in the second group (N=55) there was no recorded pathology in either biological parent, and adoptees were matched for relevant factors such as age and sex.

The main behavioral findings contrasting the two adoptee groups were increased incidence in experimental adoptees of 1) childhood hyperactivity in males, 2) behavior disorder requiring professional treatment, 3) antisocial behaviors and temperament traits characteristic of the "difficult" child in males, and 4) hyperactivity (mainly in males) in those who had an antisocial biological parent compared with those whose parents had other psychiatric diagnoses.

One of the primary findings, the overrepresentation of males with psychopathology, raised the question of whether female children or adolescents might manifest psychopathology differently than males. Such a possibility is suggested by studies that have related hysteria in females (characterized chiefly by multiple somatic complaints without a medical basis) to parental antisocial personality or hysteria (3). In hysteria, the somatic symptoms usually commence in childhood and adolescence. Furthermore, studies of adult antisocial individuals indicate that a high percentage have multiple somatic symptoms, such as anxiety attacks, dizzy spells, weakness, etc. (4). Rutter (5), in his population survey of children on the Isle of Wight, reported that psychiatrically disturbed girls had high incidences of stomachaches, eating difficulties, aches and pains, and absences from school for trivial reasons compared with psychiatrically disturbed boys, who did not show higher percentages of these behaviors than were found in the general population. These data suggest that one of the manifestations of a childhood psychiatric disturbance, especially personality disorder, can be multiple somatic symptoms and that females might be more likely than males to manifest these kinds of symptoms.

This paper supports the hypothesis that female adoptees of antisocial biological backgrounds might have higher percentages of somatic symptoms. We shall also report on related medical aspects of childhood illness and medical utilization, such as hospitalization and physician visits.

METHOD

Our previous reports (1, 2) detailed the selection of adoptees and the conduct of the structured interview with the adoptive parents to determine childhood and adolescent behaviors. At the time of the parental interview the median age of the adoptees was 17. Interviews were conducted by a professional social worker who was blind to the adoptee's group (control or experimental).

A number of questions covering physical health during infancy, childhood, and adolescence were asked. Our analysis organized these questions into the following areas:

1. Multiple somatic complaints, determined by the number of affirmative answers to whether the adoptee missed school a lot because of sickness, complained a lot of aches and pains without cause, was sickly as a child, fainted, had nervous problems with somatic symptoms (e.g., nervous stomach, headache), had

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unexplained medical problems, and/or experienced menstrual problems (e.g., irregularity, cramps).[1]

2. *Medical utilization*, defined as the number of visits to the doctor per year and the number of hospitalizations in a lifetime.

3. *Childhood physical illness*, i.e., whether the adoptee had had one or more usual childhood illness (measles, mumps, chickenpox, etc.) and other acute or chronic illnesses or operations.

Frequency distribution of scores of each of these three areas were made separately for males and females, comparing controls and experimentals and contrasting within the experimental group adoptees of antisocial biological parentage with those whose biological parents had other psychiatric conditions. Differences between distributions were analyzed by the Mann-Whitney U test (8). Two-tailed probabilities are used throughout in reporting significance levels.

RESULTS

The main findings in our study concerned somatic complaints. In general, the female adoptees registered more somatic complaints than the males even when menstrual problems were excluded, although the difference in numbers of somatic symptoms (excluding menstrual ones) was significant only at the 10% level (two-tailed, $p=.068$, U test). This difference makes comparison within sexes mandatory. Experimental female adoptees from antisocial parentage had significantly more somatic complaints than both the female controls ($p=.016$) and the remainder of the experimental females ($p=.008$). The corresponding differences for males are similar but not significant by themselves.

Both the frequency distribution of yearly visits to doctors and the frequency distribution for lifetime hospitalization showed no differences when we compared experimental with control probands or probands of antisocial background with remaining proband groups.

Almost all adoptees had had the usual childhood illnesses such as chickenpox or mumps. Other major medical illnesses that occurred in the adoptees were asthma, hepatitis, meningitis, pneumonia, scarlet fever, etc. There are no overall differences between the groups in number of major illnesses. There appears to be a nonsignificant trend for more severe illness to be reported among female adoptees from antisocial backgrounds (5 out of 10 had severe illness) as opposed to that reported in the remaining experimental female adoptees (2 out of 17 had severe illness).

Because this trend for more severe illness might be associated with such consequences as missing school, fainting or similar symptoms, or labeling a child as "sickly," we reanalyzed our original data on multiple somatic complaints, including only items that were not likely consequences of having a more severe physical illness (complaints of aches and pains without cause, nervous problems with somatic symptoms, unexplained medical problems, and menstrual problems). The results were similar, i.e., the female adoptees from antisocial biological backgrounds had more somatic complaints when compared with the control group ($p=.03$) or with the remaining experimental adoptees ($p=.05$).

[1]Some of these items are often reported positive in studies of hysterics (6, 7), and several cover functional symptoms characteristic of neurotic or hysteric individuals (e.g., fainting, nervous stomach).

DISCUSSION

We found more complaints of medical symptoms in female adoptees from antisocial biological backgrounds. The quality of the complaints appears to relate more to behavioral problems (reporting aches and pains without cause) or functional problems (nervous stomach, headaches, menstrual cramping and irregularities) and is similar to the types of symptoms reported in hysterics (6), although none of the female adoptees in this study had enough symptoms to qualify for a diagnosis of hysteria. This finding of more somatic complaints among daughters is consistent with the family studies that reported increased incidence of hysteria among the daughters of antisocial women (3). Unfortunately we do not know the long-term outcome of these adoptees, i.e., how many would eventually qualify for a diagnosis of hysteria or Briquet's syndrome.

In another adoptee study of offspring of antisocial women, Crowe failed to find hysterics among the daughters (9); he also found that somatic complaints in these daughters of antisocials were no more frequent than in a matched control group of female adoptees (10). However, certain differences between the two studies could account for the lack of somatic complaints in the Crowe data. His study, in which each interviewed adoptee received a medical review of systems aimed at symptoms occurring mainly during adulthood, did not specifically examine childhood or adolescent behavior; he also did not interview parents about malingering or exaggeration of symptoms in their children. Our study examined both of these areas.

CONCLUSIONS

The only significant difference between females in this study was the finding of increased somatic complaints in experimental female adoptees of antisocial backgrounds. The nature of their complaints was similar to that reported by Rutter (5) in his study of psychiatrically disturbed female children in the Isle of Wight. Our male adoptees, by contrast, showed a number of significant differences, with the experimental adoptees having a higher incidence of behavioral conditions requiring professional care, childhood hyperactivity, antisocial behavior traits, and temperament traits characteristic of difficult children (2). Whether

these are sex-influenced genetic differences is a question for further research. The possibility that psychiatric disturbance could manifest as multiple somatic symptoms in females is important clinically in the diagnosis and management of childhood and adolescent "medical" and behavioral problems.

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Male Transsexuals in the Homosexual Subculture

BY EDWARD M. LEVINE, PH.D.

The author describes 20 male transsexuals who differ from most discussed in professional studies and from those in media portrayals in that they live in the male homosexual subculture. Furthermore, interviews with these individuals indicated that transsexuals are no more sexually or socially homogeneous than heterosexuals or homosexuals. In general, these men entered the homosexual subculture in their teens; they knew they were not heterosexual and therefore assumed they must be homosexual. As their gender identity crystallized, homosexual activity became repugnant and they rejected and were rejected by male homosexuals. Being unable to attract heterosexual men, they sought bisexual partners in a futile effort to confirm their identity as females. The author suggests that in addition to efforts to help transsexuals shift their gender identity, psychiatrists should emphasize prevention of this psychopathologic symptom.

THE PHENOMENON of transsexualism has recently caught the public's attention. It has been incorporated in college courses on various aspects of human sexual behavior and has been the subject of a number of television panel and interview shows over the past few years. However, most of what is discussed or portrayed about transsexualism is restricted in content and perspective, largely because of the nature of the group of transsexuals about whom most is known.

The great majority of men whose transsexual identity has been confirmed by psychiatric diagnosis have been unknown as such to anyone but the diagnosticians and others whose assistance they have sought. These individuals seem to lead ordinary lives—they are employed in a variety of occupations where their attire and sex roles and general social behavior are male. In addition, their lives seem to differ little, if at all, from those of others in the heterosexual communities in which they live. Indeed, when they decide to become full-time, cross-dressing transsexuals, their social acquaintances are shocked because they have had no inkling that this metamorphosis was being considered or was even possible. Such male transsexuals characteristically avoid contact with other sexual deviants, including other male transsexuals and homosexuals, and are not involved in prostitution. Thus they might fairly be depicted as "straight" middle-class people, a description that is either implied or stated in the literature.

There are, however, other psychiatrically confirmed

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male transsexuals whose life-styles contrast markedly with the majority of those about whom we have information. The discussion that follows, which is an extension of previous research (1, 2), is based on interviews with 20 transsexuals[1] who live in the male homosexual subculture; the transsexuals' homosexual acquaintances were also interviewed. These interviews indicated that there are increasing numbers of male transsexuals who live in this subculture and whose problems and life-styles are much like those of the men in this sample, who stated that they knew many others like themselves.

The information gained about certain key aspects of the lives of the individuals in this sample provides an added dimension to our knowledge about transsexualism, if only because it indicates that transsexuals are no more socially or sexually homogeneous a group than are other sexual deviants or heterosexuals.

Much of the literature on male transsexuals has focused on their more obvious problems and tensions and has emphasized ways in which they can and should be assisted. One of these methods is sex-change surgery, which is intended to provide a more effective adjustment to the transsexual gender and psychosocial identity. Sensitivity to and familiarity with the transsexuals' plight are translated, quite understandably, into a genuine professional desire to alleviate their problems when at all feasible.

This outlook has been supplemented in recent years by the appearance on television shows of male transsexuals who have changed gender. Characteristically, these programs do not raise questions about the etiology of transsexualism, much less discuss the question of whether or not it is a psychopathologic symptom. This is due, in part, to the assumption that viewers would be bored by time-consuming technical explanations. Inasmuch as those in charge of television programming are always looking for novel subjects to maintain and boost their audience ratings, it is finances, rather than social responsibility or mental health considerations, that dictate how topics on sexual deviance will be presented to an impressionable audience.

Understanding of and sympathy toward transsexualism on the part of the public and of professionals are increasing. One impression that is easily drawn from media presentations is that there is an "average" male transsexual. However, there are transsexual men who are six feet tall and taller, weigh 200 pounds and more, and have body configurations that stamp them unmistakably as men no matter how successful they are in modifying their bodies, apparel, mannerisms, and tone of voice. Will such tragic figures really convince anyone, particularly the heterosexual men they so desperately wish to attract, that they are females?

Of course it is important to attempt to assist transsexuals in solving their problems; it is, however, equally important to recognize that transsexualism is a psychopathologic symptom and that appropriate attention and concern should be given to its prevention (3). It is from this perspective that I will examine certain aspects of the interpersonal relationships of male transsexuals in the homosexual subculture that add psychological problems to their already burdened lives.

TRANSSEXUALS: THE HOMOSEXUAL PHASE

The transsexuals in this sample went through two transitional phases. The first was during their late teens when they were introduced to the male homosexual subculture by homosexuals who befriended them at a time when they assumed that they "must" be homosexual, since they knew they were not heterosexual. A factor that "confirmed" this belief was that all of them had been involved in homosexual relations, although they were invariably passive and never actively pursued a homosexual partner. The second phase involved their complete detachment from homosexuals, their new relationships, and the problems this change entailed.

Entering the male homosexual subculture provided these men with an enormous sense of relief from the tensions they had suffered from having to hide their "homosexuality" from parents and friends.[2] Upon severing their relations with their families, they moved permanently into areas near bars that cater almost exclusively to male sexual deviants. However, as their sense of gender identity began to crystallize, they gradually realized that they were *not* homosexuals, and homosexual activity had become repulsive to them. Consequently, their once close personal relationships with male homosexuals grew cool and distant. As they withdrew from these relationships, the homosexuals they had been close to began to view them as "women" and, therefore, as sexually repugnant.

Furthermore, the transsexuals had become competitors with the homosexuals for male bisexual partners for sex and, to a lesser extent, for companionship. The homosexuals became openly depreciating of and insulting toward the transsexuals and vilified them in their comments during interviews. (Competition among male heterosexuals for partners is less intense because they are less driven by sexual and personality compulsions, and because their lives are more generally governed by social norms that effectively mitigate any hostilities they may have toward perceived competitors.)

[1]I should note that there is no way in which the sociologist can determine the accuracy of the psychiatric diagnoses that confirmed these individuals' claims of transsexuality. However, two individuals were subsequently approved for sex-change surgery, so there seems to be some basis for their claims and the correctness of the diagnoses.

[2]Field research indicated that female-to-male transsexuals almost invariably patronize lesbian bars, thereby maintaining a pattern of sex-role segregation that sharply contrasts with many contemporary heterosexual sex-role trends.

Transsexuals are often receiving estrogen and are therefore less driven by sexual impulses. However, their consuming need to prove that they are women leads them to search constantly for a heterosexual male who, in their minds, is the only person who can confirm their identity as women. However, they can not attract such individuals and are, therefore, obliged to turn to bisexual men.

The transsexuals in this sample had been or, when interviewed, were involved in prostitution—unlike, it should be recalled, most of the transsexuals who have been described in the literature. All of them said they did this in order to supplement their incomes, since they had, for a variety of reasons, quit their jobs (or in the case of a few of the youngest, had never been gainfully employed) and were dependent on welfare. None of them was happy about having resorted to prostitution, and their major source of satisfaction (aside from the income) was deceiving heterosexual males into assuming they were consorting with females.

RELATIONSHIPS WITH BISEXUALS

Sooner or later, these transsexuals found a male bisexual lover to decrease their intense loneliness and in an ill-disguised and futile effort to prove that they could attract and keep the attentions of a "heterosexual" male. However, it was common knowledge that their lovers were bisexual. What was less generally known, however, was that some of these bisexuals frequently prevailed on their transsexual "mistresses" to resort to prostitution to supplement their incomes, for most of the bisexuals were not employed full time or held low-paying jobs.

That the transsexuals yielded to this manipulation was evidence of their extreme dependency on the bisexuals for companionship and sex, which was heightened by the fact that the bisexuals were invariably dominant in these relationships. In addition, the bisexual partner alone could maintain the facade of female heterosexuality that the transsexuals so desperately wanted.

As might be suspected, the living arrangements of the transsexuals and their bisexual lovers were set up chiefly to suit the convenience and whims of the bisexuals who offered no assistance in taking care of household tasks, and generally felt free to come and go and spend money as they wished. These situations were not merely a contemporary reflection of more traditional living arrangements of heterosexual couples; they clearly expressed the unquestioned dominance of the bisexuals, whose domineering personalities, not simply the preferences and needs of lovers, took priority over all other considerations. It is no exaggeration to say that these bisexuals were examples of male chauvinism at its worst.

The lives of the transsexual men in this sample were riddled with unpleasant experiences in their relationships with homosexual acquaintances and with bisexual lovers. They were depreciated and degraded by other sexual deviants, which they had not anticipated and which counteracted the personal gains they felt they had achieved in being able to live openly as transsexuals. Informal comments during one of the interview sessions indicated that professional and public acceptance of male transsexuals will not cause their personal problems to vanish. These problems stem from their male anatomies and sense of female gender and from their clearly weak, dependent personalities (3, 4).

INTERPERSONAL PROBLEMS AMONG MALE TRANSSEXUALS

The personality disturbances of these men had a considerable effect on their social relationships with other transsexuals. It was assumed that individuals whose lives are so beset with difficulties would be particularly sensitive and sympathetic toward others like themselves. Surprisingly, the opposite proved to be the case. They did not seek each other out as roommates in order to share expenses and gain companionship and commiseration; in fact, they very rarely invited other transsexuals to their apartments. Aside from meeting other transsexuals in homosexual bars, their social life was meager.

The underlying reason for this seemed to be their deep-seated emotional insecurity, which was expressed in their deprecatory comments about other transsexuals. Those interviewed were asked to estimate the number of transsexuals in Chicago (estimates ranged from 75 to 500) and then were asked how many they knew personally. At this point, they said they really doubted that the others they knew were truly transsexuals. They criticized them for their lack of femininity, which they believed manifestly established transsexuality, or expressed their underlying resentment by casually suggesting that they were attempting to "pass" as transsexuals but were actually "drag queens." Inasmuch as they could not have known (except in cases of close personal acquaintances) whether these individuals had been psychiatrically confirmed as transsexuals, it was clear that they were attempting to shore up their emotional insecurities by denying or raising serious doubts about the transsexualism of others.

COMMENT

There is reason to suggest that increased social acceptability of various forms of sexual deviance will result in more transsexuals recognizing their transsexuality earlier, seeking to openly establish it sooner, and more casually adopting the life-style appropriate to their transformation in gender identity.

Given this possibility, it is appropriate to ask if it is not now time to shift the emphasis from a responsible

professional desire to help transsexuals to one which, while not abandoning this perspective, directs attention to the psychopathologic character of transsexualism and encourages improved parenting in order to avoid the development of transsexualism. What I am suggesting is that as much emphasis be placed on prevention as on procedures designed to facilitate social and anatomical changes in transsexuals' transitions from male to female. Obviously, this responsibility can be most effectively assumed by psychiatrists.

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Problems in the Differential Diagnosis of Narcolepsy Versus Schizophrenia

BY BRUCE SHAPIRO, M.D., AND HENRY SPITZ, M.D.

The authors discuss the problems of accurately diagnosing narcolepsy when patients manifest the auxiliary symptoms of this disorder, i.e., cataplexy, hypnagogic hallucinations, and sleep paralysis, which often seem to indicate a psychiatric diagnosis. They conclude that misdiagnosis of narcolepsy can be avoided if clinicians are aware that this illness can simulate a psychiatric disorder and if they give careful attention to the history of the patient's illness.

OVER THE PAST 20 years the recognition and understanding of sleep disorders have received increased attention in the psychiatric literature. The major impetus for this development was the electroencephalographic elucidation of man's sleeping state. Aserinsky (1), Kleitman (2), Dement (3), and others revealed that sleep normally proceeds in various stages, and that the difference between wakefulness and sleep is not akin simply to the difference between day and night.

It is now known that EEG tracings of "normal" human sleep are characterized by four nonrapid eye movement (NREM) and one rapid eye movement (REM) stages. With the aid of electroencephalography, electrooculography, and electromyography, it has been established (4) that the healthy adult shifts from wakefulness to stage I sleep, characterized by an EEG pattern of relatively low voltage and mixed frequency. Stage I sleep is followed by stage II (characterized by 12-14 Hz sleep spindles), which in turn makes a transition to stages III and IV (both characterized by slow waves of 1-2 Hz, with stage III showing fewer slow waves than stage IV). Approximately every 70 to 90 minutes this series of sleep events is interrupted by rapid eye movements and generalized hypotonia (except for the extraocular and respiratory muscles), along with numerous other physiological changes and an EEG pattern similar to that of stage I sleep. This is the commonly referred to REM stage of sleep, which occurs with some regularity among the NREM stages with increasing frequency during the night.

Thus the healthy adult is engaged in a rather complicated series of central nervous system changes during the still mysterious one-third of life that we call sleep. In some persons the length, order, regularity, or relationship to wakefulness of these various stages deviates significantly from the statistical norm. One resulting sleep disorder is narcolepsy.

NARCOLEPSY AND ITS AUXILIARY SYMPTOMS

Narcolepsy ("sleep attacks") is a disorder of the sleep-wake cycle characterized clinically by the sudden, often irresistible urge to sleep. Gelineau (5) first named the disorder in 1880, and a classic description was written by Daniels in 1934 (6). Recently several excellent clinical descriptions and literature reviews have appeared (7–9). The work of Hishakawa and asso-

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ciates (10–12) typifies current efforts to clarify etiologic factors in narcolepsy and sleep paralysis.

EEGs of patients with narcolepsy performed outside a sleep laboratory are usually within normal limits. With continuous recording, however, the EEG may show various diagnostic changes (13–15), depending on whether the patient has REM or NREM narcolepsy. In many patients the sleep attack is associated with a loss of muscle tone called cataplexy. Cataplexy, which is the most common of three auxiliary symptoms of narcolepsy, occurs in approximately 70% of patients (16). Laughter and anger are the most frequent emotional precipitants of cataplexy. Another auxiliary symptom, hypnagogic hallucinations, occurs in about 25% of patients (17). The least common of the narcoleptic symptom tetrad is sleep paralysis—a condition in which the patient may feel completely paralyzed for as long as 20 minutes during the transitions between wakefulness and sleep. Interestingly enough, sleep paralysis is often overcome if the patient is touched by another person.

In the majority of narcoleptic patients sleep attacks are associated with a shift from wakefulness to REM-stage sleep without the usual intervening stages. It is generally thought that the cataplectic episode is due to a failure to normally suppress direct entry into REM sleep from the waking state (18).

APPARENT PSYCHIATRIC PRESENTATION

Clinicians encountering a patient with one of the auxiliary symptoms of narcolepsy may think that he or she is suffering from a primary psychiatric disorder, especially if the patient does not spontaneously give an adequate history of sleep attacks. A patient's or family's description of cataplexy might seem at first to be a manifestation of hysteria, conversion reaction, depression, catatonia, or other psychiatric illness. As Pincus and Tucker stated, "These patients often fall asleep under boring social circumstances conducive to sleep. This is often misunderstood and the patients are considered lazy, impolite, neurotic, or worse" (16). The experience of listening to a narcoleptic patient describe vivid hypnagogic hallucinations is striking, since he may recount his interactions with people and objects in much the same way that a psychotic patient describes hallucinated experiences.

Narcoleptic patients at mental health clinics or psychiatrists' offices are frequently diagnosed as having a psychiatric disorder and treated accordingly. The following clinical vignette illustrates some of the potential pitfalls in the diagnosis and treatment of the narcoleptic patient.

CASE REPORT

The patient, a 42-year-old woman, first came to the mental hygiene clinic in October 1971, complaining of "seeing people in my room" and "hearing voices from out of this world." The examiner noted flat affect, hallucinations, and difficulty sleeping, and the patient was given the diagnosis of chronic undifferentiated schizophrenia. She was medicated with 2 mg of trifluoperazine orally three times a day and 100 mg of chlorpromazine orally at bedtime.

The patient seemed to improve and in November 1971 stated, "I just want you to sign for my medicine, I don't want to see you for anything more cause I'm getting along all right." She added, "I have trouble sleeping—every night I see my mother and she's dead." At this point another observer noted the presence of hypnagogic hallucinations and diagnosed the patient as having no mental disorder. She was then discharged with a diagnosis of latent schizophrenia and advised to return to the clinic if more symptoms developed. She did not return to the mental hygiene clinic, in spite of the recurrence of her presenting symptoms. Instead she continued to see a physician in the medical clinic for multiple medical problems.

In January 1975, the patient again entered the mental health clinic complaining of "pains in the head" and nervousness. She spoke of her persistent trouble sleeping and the "veil over my eyes seeing ghosts ever since I was born." She reiterated the problem of hearing voices and having nightly visits from her mother. This confused her even more because her mother had died in 1964. She related the head pains and nervousness to the death of her mother.

At this intake the patient was described as having a disorder that might be "compatible with culturally determined hysteria," but was officially diagnosed as suffering from chronic undifferentiated schizophrenia and was referred within the clinic for neuroleptic therapy. Her hospital chart indicated a consensus that she was a schizophrenic who experienced delusional and hallucinatory states.

Upon referral for pharmacotherapy the patient vividly described seeing her dead mother. She said, "My mother visits me every night, she comes into my room and she bothers me." Further history revealed that the patient *only* saw her mother when she was drowsy or falling asleep and *never* when she felt alert. A mental status examination demonstrated a range of appropriate affective responses, no signs of formal thought disorder, and no signs of clinical affective illness. She was oriented to time, place, and person, and her judgment was intact. There was no evidence of memory loss.

Neuroleptic medication was discontinued, the patient was sent for an EEG, and was given 30 mg of flurazepam orally at bedtime. She was instructed to return in 1 week. The next visit was rather dramatic. She entered the room and said "I just don't see or hear my mother at night anymore." She seemed grateful and cheerful and claimed that the medication had helped her. At this point it was clear that the patient's nightly "visits from her mother" were not necessarily the product of psychosis but vividly recalled hypnagogic states. These phenomena, along with disordered sleep, were thought to be a manifestation of a primary sleep disorder (narcolepsy). A more detailed history revealed that the patient had experienced daily episodes of irresistible urges to sleep for as long as she could remember. At times she would fall down asleep during the day, usually escaping injury by grabbing onto a chair or couch. At the onset of these sleep attacks she often heard voices and saw people. Many years before, when she was first frightened by these experiences, her father had explained them in terms of "spirits."

The patient's medical status included cardiovascular and metabolic conditions that precluded the use of the usual REM-suppressant medications (i.e., stimulants, tricyclic antidepressants, monoamine oxidase inhibitors, or strong

hypnotics), and treatment with flurazepam was maintained. In addition the patient began a program of reeducation about her illness and was placed in a weekly outpatient psychotherapy group. Her EEG was within normal limits.

At the time of this writing the patient has been on this regimen for more than 6 months. She has had few nocturnal hypnagogic experiences and the frequency of daytime auxiliary symptoms has been reduced markedly. She understands the nature of her symptoms and fears them less. She has attended group meetings regularly. A major theme in psychotherapy has been the effect on her life of years of being considered mentally ill. The patient is presently continuing in treatment in an effort to cope with her remaining difficulties.

DISCUSSION

This case history typifies problems encountered by the narcoleptic patient with auxiliary phenomena, who often describes hallucinations and is then rapidly given a psychiatric diagnosis. The maxim that hallucinations are not pathognomonic of schizophrenia (19) is often overlooked. In the case of sleep disorders this is of particular importance since hallucinatory experiences are frequently reported.

Physicians are taught early in their training that the clinician who does not remind himself about the existence of a disease entity will be unlikely to correctly diagnose that disorder. The psychologically minded clinician who has little contact with sleep disorders is a prime candidate for misdiagnosing narcoleptic patients. The deleterious effects of misdiagnosis are evident on several levels. Obviously, the choice of pharmacologic and/or psychotherapeutic treatment hinges upon diagnosis. Of equal importance are the social and characterological effects on an individual who is inappropriately labeled as seriously mentally ill.

A great deal of psychiatric literature has been concerned with accuracy in the diagnosis of mental illness, but there are still many patients who receive, for example, a diagnosis of both schizophrenia *and* major affective illness. Until questions of etiology are made clearer we must understand and expect such difficulties. However, some diagnostic dilemmas are avoidable. Differentiating between narcolepsy and schizophrenia or other psychoses is a case in point. Misdiagnosis can be avoided by the clinician's awareness of sleep disorders and by careful attention to the routine taking of a detailed history of the patient's present illness.

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Characteristics of "Erotic" Practitioners

BY SHELDON H. KARDENER, M.D., MARIELLE FULLER, AND IVAN N. MENSH, PH.D.

Using the responses of 460 physicians to a questionnaire survey regarding sexual contact with patients (1), the authors attempt to statistically differentiate two groups—erotic practitioners and nonerotic practitioners. Analysis of data suggests that the freer a physician is with nonerotic contact with patients, the more statistically likely he is to engage in erotic contact.

A PREVIOUSLY PUBLISHED report (1) presented the results of a survey undertaken to determine the attitudes and behaviors of male physicians in five specialties regarding erotic and nonerotic behaviors with their patients. The purpose of this paper is to report data derived from a comparison of responses of the 59 physicians who acknowledged sexual contact with their patients and the 401 physicians who specifically denied any such contact. The full details of the overall study (1) and the philosophical and psychodynamic considerations of physicians engaging in sexual relationships with their patients (2) have already been published.

The analysis of the data comparing the two groups—erotic practitioners (EP) and nonerotic practitioners (NEP)—will be presented in terms of objective numerical responses and subjective "fill-in" statements.

DATA

In the EP group (N=59), the percentages of the total respondents from each specialty were as follows: psychiatrists, 10% (N=12); surgeons, 10% (N=7); obstetrician-gynecologists, 18% (N=15); internists, 12% (N=11); and general practitioners, 13% (N=14). There were no statistically significant differences between the EP and NEP groups regarding specialty, age, years in practice, marital status, years married, number of marriages, or the responses to the question, "Do you attempt to treat sexual problems in your medical practice?"

However, the responses to the following series of questions regarding nonerotic behaviors with patients served to differentiate the EP and NEP groups: "Do you believe *nonerotic* hugging, kissing, affectionate touching of patients may be beneficial?" ($p<.01$); "Do you engage in such practices?" ($p<.01$); "How often is this [nonerotic behavior] initiated by you?" ($p<.01$); "How often is this initiated by the patient?" ($p<.02$); "How often is this mutually initiated?" ($p<.01$); and "Do you believe such [nonerotic] behavior might be misunderstood?" ($p<.01$). Similarly, there was a statistically significant difference ($p<.01$) in the subjective responses to the question, "Under what circumstances might such behavior be utilized in treatment?" Responses to a similar series of questions regarding erotic contact with patients resulted in statistically significant differences, but these are not relevant since, by definition, these questions served to differentiate the two groups.

Because of the sensitive nature of this subject, it is particularly important to present the subjective response data provided by the EP and NEP groups for two questions—"Under what circumstances would nonerotic behavior with patients be beneficial?" and "Under what circumstances would erotic behavior be beneficial?"

There were 246 responses to the question on benefit of nonerotic contact—37 from the EP and 209 from the NEP group. The polarity of the groups became immediately apparent when their written comments were reviewed, but there was some overlapping. The NEP group responses ranged from "never" to "very conservative," whereas the EP group's responses ranged from "conservative" to "very liberal." The overlap, of course, occurred with the responses characterized as "conservative." Some of the comments from the NEP group included "never beneficial," "I can't think of any reason," "would contaminate the professional relationship," "never by the doctor though all right if the patient initiates," "no more than a handshake, perhaps," "when there is severe emotional trauma as in learning of a fatal disease or the death of a loved one," "elderly patients," "children only," "never kissing or hugging," "60-plus females maybe," "extreme circumstances," "extreme depression," "to let the patient know you want to be of help," "hold a hand at most," "if there has been a disaster or catastrophe,"

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"severely withdrawn, isolated patient," "touching a shoulder to show reassurance," and "certain psychotic patients (who are out of touch)."

The EP group's comments paralleled some of the NEP group's comments except for the absence of any injunctions regarding nonerotic contact. Furthermore, the EP group made several "liberal" statements: "to provide reassurance [whenever necessary]," "to show support and acceptance," "whenever appropriate," "laying on of hands," "attempt to facilitate [therapy]," "attempt to encourage flowing [sic] with the here and now," "helps feelings of loneliness," "for [greater] rapport," and "when patients leave after long-term treatment."

There were 221 responses to the second question, "Under what circumstances might erotic contact with a patient be beneficial?", 31 from the EP group and 184 from the NEP group. There was absolute unanimity in the comments by the NEP group, all of whom stated at the very least that erotic contact was never beneficial. Many condemned such behavior, e.g., "represents ignorance or exploitation on the part of the doctor," "any doctor who can't control his emotions is unqualified," "appalling to contemplate," "any doctor who does needs therapy," "destroys relationship," "very sick behavior," "doesn't belong in therapy," "pelvic exams are hazardous enough," "any doctor who does is treating himself—not his patients," "evidence of psychosis in the doctor," "unethical," "unthinkable," "might be fun, but never therapy," and "might be all right for psychiatrists but never for doctors."

In contrast, the EP group provided the following responses: "demonstrates doctor's effectiveness to his patient," "supports and reinforces a patient's sexual appeal," "stimulating the clitoris helps a patient relax," "with friends who coincidentally happen to be patients," "it's OK since I'm not a doctor, I'm a therapist," "with mature patients," "it was originally for my need, but led to better rapport and more durable relationship," "when the patient ceased to be a patient," "with consent if a patient is over 21," "with consent but not in the office," "for teaching purposes," and "the intercourse was made part of the therapy."

It is particularly noteworthy that many of the responses from the EP group either condemned the practice or acknowledged it was not of benefit. For example, "(it's) never therapy," "might lose license," "never beneficial," "severs the relationship," "occupational hazard," "ended the relationship because the patient felt too guilty," "leads to harmful relationship," "it happens but is an error," "inexcusable," and "I told the patient not to return (afterward)."

DISCUSSION

The data indicate that no differentiation could be made in demographic variables between those physicians who engage in erotic behavior with their patients and those who do not. Nor does the physician's qualifications for specifically treating sexual problems distinguish these two groups. It is singularly the physicians' attitudes and practices regarding *nonerotic* behavior with patients that distinguish those who would also engage in erotic behavior. It would appear that the freer a physician is with nonerotic contact, the more statistically likely he is to also engage in erotic practices with his patient.

In a 1931 exchange of letters with Ferenczi, Freud discussed the danger of engaging nonerotically with a patient (3). Specifically, he was concerned that, while Ferenczi might be able to confine his physical contact with a patient to the nonerotic sphere, the advocacy of such practices would readily lead to both a relaxation and extension of proper limits. The danger of an "anything goes" ethic easily could be the result. The data presented in this paper tend to support Freud's hypothesis and underscore his concerns.

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Self-Induced Depersonalization Syndrome

BY RAYMOND B. KENNEDY, JR., M.D.

The author reports two cases in which depersonalization occurred during the waking consciousness of individuals who had engaged in meditative techniques designed to alter consciousness. Psychiatrists should be aware of this phenomenon, as the number of organizations in the "consciousness movement" is increasing, and should ask people manifesting depersonalization about any involvement in activities leading to altered states of consciousness. In some cases it might be appropriate to refer such patients to responsible groups that teach altered consciousness by meditation as an ego-syntonic desirable state. The author cautions against the use of phenothiazines in cases where depersonalization is a prominent feature.

OF LATE, we have witnessed a burgeoning of groups that have alteration of the consciousness of their members as one of their primary goals. These groups employ many and varied techniques and range in accessibility from such highly publicized and scientifically researched organizations as Transcendental Meditation to obscure and esoteric organizations that operate completely out of view of the general public but nevertheless have substantial memberships. Some of these organizations claim to require of their members no more than 20 minutes twice a day, while others require a total life commitment. I consider this new movement aimed at the physiological alteration of consciousness (as opposed to the pharmacological alteration of the sixties and early seventies) to be one of the most important events on the contemporary scene, and I think it will undoubtedly have effects throughout the fields of psychology and psychiatry. At present, we as a profession seem to be paying this movement little mind.

The following two cases represent one of the epiphenomena from the consciousness movement.

CASE REPORTS

Case 1. A successful 37-year-old businessman became curious about yoga and different means of increasing self-awareness. One evening, while alone, he conducted a series of exercises described in a book called *Awareness* (1).

During a breathing exercise, he experienced a feeling of being outside of his body looking down on himself. Frightened by this feeling, he terminated his experiment, but he tried it again later that evening with the same results. Over the next few days, he tried several such experiments but stopped when strange experiences began to occur spontaneously and uncontrollably. He felt at times that either he was not real or that his surroundings were not real. After he saw a double image of himself in a mirror, he sought admission to a local hospital, where he was treated with tranquilizers and released. He sought readmission a few days later in a state of panic because the tranquilizers he had been given (he did not recall the name) seemed to increase his feelings of unreality.

ECT was proposed to him but he refused, left the hospital, and on the advice of a friend sought help from a long-time practitioner of yoga. He stayed with this yoga instructor for several days and then was able to return to work, feeling that he had gained enough insight into the occurrences that he was no longer bothered by them.

I saw and interviewed this man when he came to visit an Indian yogi and guru whom I was studying and studying with. He had been told by his first yoga instructor that he should visit this particular yogi because he had had "many and great experiences that will be of great benefit to you."

When I interviewed him, approximately 16 months had passed since the first depersonalization episode; although he continued to have intermittent episodes consisting primarily of autoscopy (feeling of looking down on oneself from above) and double mirror images, he now experienced these as ego-syntonic and was able to carry on his routine business activities without interruption. He was well-groomed and dressed like a businessman in coat and tie. His affect was appropriate, his associations were tight, and there was no evidence of maladaptive behavior or thinking. He was warmly received by the yogi (Swami Maktananda), who seemed intuitively to know of his situation. The Swami told him that such experiences sometimes occur in one's *sadhana* (spiritual practices) and admonished him never to go to a hospital again and under no circumstances to have "shock treatment."

Case 2. A 24-year-old man went to a mental health center with complaints of increasingly frequent episodes of feeling that things around him were unreal, alternating with periods in which he himself felt unreal. The episodes had begun 18–24 months earlier and had not caused him great alarm at first, but later he became unable to maintain employment because of them. He mentioned further episodes in which the sidewalk appeared to disintegrate beneath his feet. The psychiatrist who originally saw him was concerned that this might represent an organic brain lesion and obtained an EEG, brain scan, skull films, and EMI scan, all of which were normal.

Upon my initial contact with this individual, I noted a small pin on his lapel denoting his membership in Arica Insti-

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tute. I learned that he had belonged to this organization for approximately 24 months and that, although he was not currently an active member, he performed various Arica meditation exercises almost daily, occasionally for several hours at a time. After gaining some trust in me, he confided that some of the episodes he experienced represented to him a sort of fusion with the cosmos. At first he had been pleased with his ability to induce this state, but these occurrences now caused him anxiety because he was unable to control them and as a result could not hold employment. Further interviews revealed a complex social interaction between him, his wife, and another woman, and the fact that he had initially sought therapy at least in part to obtain financial assistance, which no doubt led to some exaggeration of his symptoms. After a few sessions he became calmer and was able to resume gainful employment.

It should be noted that during his evaluation he was seen by two psychiatrists, a neurologist, and two other experienced mental health professionals, none of whom thought he showed any signs of schizophrenia. Although this patient had taken LSD in the past, he had not taken any psychedelic drugs (including marijuana) for approximately 1 year.

DISCUSSION

Both of these cases have as their common feature what is referred to in psychiatric terminology as depersonalization and derealization. Depersonalization may occur in a wide variety of syndromes, including schizophrenia, various drug states (e.g., LSD intoxication and phenothiazine therapy), encephalitis, epilepsy, hysteria, manic-depressive disorders, virtually all of the neuroses (2), and even in 39–70% of the so-called normal population at one time or another (3). A chronic relapsing form of depersonalization not associated with other mental disorders and not part of a situational reaction was afforded a place of its own in the psychiatric nosology in *DSM-II* (4).

It is fairly well known that out-of-body states may occur in mystics during the trance state induced by various meditative techniques. However, to my knowledge it has not been reported that milder depersonalization and derealization states are often encountered in practitioners of meditative techniques during normal waking consciousness.

I recently interviewed a random sample of 23 students of yoga and meditation, and all but 1 told of intermittent episodes that could be classified as mild to moderate depersonalization and/or derealization. These ranged from frank out-of-body states lasting for periods of almost one hour to secondary "flashes" and feelings of altered reality, all during full waking consciousness. Most of these experiences took the form of feelings of unreality or altered reality lasting a few seconds and occurring most commonly in the presence of the meditation teacher. None of these individuals considered the occurrences to be abnormal in any way.

In casual conversation with members of other groups, I have heard several reports of similar phenomena. Actually, one might expect this since, as Sedman (3) points out, depersonalization occurs under circumstances of either altered emotions or altered consciousness, and altered consciousness is the goal of meditators. In a classical paper on depersonalization, Schilder (5) stated that such phenomena tend to occur in people who are preoccupied with self-observation and who have detached libido both from the external environment and the ego, or at least certain parts of the ego. Schilder spoke of a "criticizing and scrutinizing element of the personality which has abstracted to itself the full libido" as the observing element in the self-observation. This situation of self-observation and decathected external environment and ego is exactly what many of the consciousness-movement schools teach in their endeavor to realize the ancient maxim "know thyself" and to disengage themselves from the *maya* (illusion) of everyday life and of their "false ego." The difference between Schilder's patients and the meditators is that in the latter group the part that is observing is nonjudgmental and neutral. The other major difference between those with the psychiatric syndrome and those who voluntarily induce similar states is that the depersonalization of "self-inducers" is ego-syntonic and viewed as part of the state they are seeking.

The first individual described in this paper was frightened only until he found someone to reassure him. This reassurance apparently transformed the previously frightening episodes into ego-syntonic occurrences. The second individual had previously been a member of Arica, a group that, according to its founder and leader, is dedicated to ego destruction (6), but he was no longer actively involved with this group. His reasons for coming to therapy were mixed and his anxiety about his depersonalization states was exaggerated, but he experienced some anxiety and appeared unaware that his meditative practices were contributing to these states until the therapist pointed this out.

The intriguing aspect of this is that apparently by using virtually the same mental maneuvers a syndrome may be produced that, depending on the attitude the person adopts toward himself and then toward the resulting phenomenon, may be experienced either as something to be sought and valued or as something to be feared and called a disease. Perhaps what we need to do with patients who exhibit primarily a depersonalization syndrome is to teach them first to accept themselves uncritically and second to accept their depersonalization. Individuals who observe nonjudgmentally do not describe their altered perceptions as flat or devoid of color but as exhibiting increased color.

CONCLUSIONS

It is likely that we will see an increasing number of psychiatric casualties among individuals who seek to alter their consciousness as these practices become more widespread. These casualties will no doubt be more likely to occur outside a supportive group set-

ting, but some may occur within the groups themselves, especially as the number of such groups grows and more inherently disturbed individuals are attracted to groups with incompetent leaders. Depersonalization is one of the ways in which such casualties may manifest themselves. As psychiatrists we need to be aware that depersonalization may be self-induced. We should not neglect to ask our patients about practices that might induce or contribute to such states. As the first case I described illustrates, it might even be wise in some instances to refer such patients to particular groups, some of which are extremely reliable and in my experience are far more likely to exert a positive than a negative influence in the individual's life. Certainly, this seems a better alternative than ECT, and if such a suggestion is made by the psychiatrist, it is more likely that the individual may remain in therapy long enough to deal with any underlying pathological causes than if he finds such a group on his own. Finally, it is worth emphasizing that the phenothiazines have been reported both to cause depersonalization and to increase depersonalization in those already suffering from this symptom (3), as was probably the case with the first patient I described. Phenothiazines are therefore contraindicated when depersonalization is a prominent symptom.

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The Why of Fragging

BY THOMAS C. BOND, M.D.

The author studied 28 men convicted and confined for use of explosives in assaults on superior officers during the Viet Nam war. There were several predominant characteristics in this group, including deprivation and/or brutality in family backgrounds, poor self-image, lack of critical self-observation, the use of externalization, and feelings of insecurity or vulnerability. Drug use joined with these and several other factors related to the situation of these men in Viet Nam in a lethal combination that led to the perpetration of an indirect assault with an explosive device on a figure perceived as powerful and threatening.

OVER THE past decade, there has been an increase in the frequency of criminal use of explosives by various political groups attempting to popularize idiosyncratic views or to promote terrorism. In most instances, the targets are either property with some special significance or random individuals who are attacked in order to promote an atmosphere of fear and disorder.

The use of explosives against specific individuals is rare outside of organized crime and military combat. During the Viet Nam war, there was an upsurge of a unique type of explosive use directed by troops toward their own superior officers rather than the enemy. This form of assault became popularly known as "fragging" because of the frequent use of the fragmentation grenade. The unique nature of this phenomenon lies not so much in the choice of superiors as targets but rather in the frequency of its occurrence and the type of weapons employed. In previous wars, assaults on superiors were far less frequent. One reporter has stated,

> In World War I, which involved over 4,700,000 American military, fewer than 370 cases of violence directed at superiors were brought to courtmartial. This low ratio was fairly consistent through World War II and the Korean police action. It did not change significantly until Vietnam. (1, p. 12)

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Between 1969 and 1972, there were almost 800 recorded incidents of the use of explosive devices against superior officers. The phenomenon reached a peak in 1971, when the rate was 1.8 assaults per 1,000 servicemen in Viet Nam. These statistics reflect only assaults with explosives and do not include assaults with weapons such as guns and knives.

The scope of this activity was unprecedented, but an even more unusual factor was the specific nature of the attack. Whereas previous assaults generally involved some direct confrontation, albeit at a distance, fragging was indirect and involved no face-to-face confrontation. This fact raises interesting questions regarding the psychological makeup and motivations of the individuals involved.

It is often quite difficult to identify the perpetrators of such assaults, but we were able to interview in prison a group of men convicted of this offense. The findings of this study have been described in detail elsewhere (2); I will present a summary and conclusions here.

THE SAMPLE POPULATION

The sample consisted of 28 men who had been convicted by court-martial of using explosive devices in an assault on a superior officer while on active duty. The overwhelming majority of these assaults occurred in Viet Nam. On the average, the men were 20 years old, had served about 28 months on active duty, and 26 of the 28 had enlisted rather than having been drafted. Six of the 28 men were black.

The men reported a feeling of being scapegoated, i.e., "singled out" from their peers by command for restrictions and punishment. They were generally dissatisfied with their job assignments; many had enlisted for a particular skill and were then asked to perform unrelated jobs in which they had no prior training. The majority were assigned to support units rather than fighting units and were not in direct combat situations at the time of the assault.

NATURE OF THE ASSAULTS

The actual assaults occurred at night, most within less than 24 hours of initial intent. The actual planning or premeditation seemed to consist primarily in talking with others about intent, as if to build courage or gain support, and then using intoxicants (drugs or alcohol) to overcome any final inhibitions. The vast majority (87.5%) reported being intoxicated (on a wide variety of substances) at the time of the assault. It is also interesting to note that two-thirds of these men reported they had done nothing to avoid being caught.

Soldiers in Viet Nam had developed a macabre ritual whereby potential victims of fragging were often warned anonymously that they could expect retaliation if they did not change their mode of behavior. "Bounties," in the form of cash donations, were often pooled by the soldiers in a specific unit to be paid to the man who carried out the final assault. This bounty system was designed to intimidate officers; therefore it was essential the officer be informed of the situation. Although many of the victims of the offenders we studied had been warned, the attacker rarely had done the warning. Only one man in this sample reported that there had been a bounty on his victim; he said that this played no part in his final action.

The choice of the victim reflected the command structure on the unit level—captains and first sergeants were the predominant targets. On the company level, the captain is primarily responsible for disciplinary action, promotions, and transfers, and is the highest ranking authority with whom these men had contact. The first sergeant is responsible for work details, passes, and recommendations to the captain for various forms of action. Thus, in essence, the victims were those held to be most responsible for the offender's predicament.

In terms of precipitants for the action, 75% of the sample reported some disagreement with the victim or victims, either verbal or physical, and almost 90% of these took action within 3 days of the altercation. The victims were seen as having deprived the offender of something he wanted (e.g., promotion, discharge, transfer, or drugs) and were further perceived to be a threat and a danger to the offenders—either physically or psychologically, or through their incompetence.

Two factors that did not prove to be significant were racial tension and political activism. The first factor should be qualified in that only 4 of the 24 men personally interviewed were black, and 2 of them felt race was a factor in the offense. With regard to political activism, the men generally seemed apolitical; most had enlisted in the service and supported the war effort. Further, most of them were loners and not given to participating in idealistic causes.

PSYCHOLOGICAL FACTORS

The offenders' backgrounds involved parental separations and brutality, poor performance in school situations (only 5 had graduated from high school), no viable marriages, and previous incidents of lesser forms of antisocial behavior. These men had experienced rejection and disappointment throughout their lives and demonstrated a low tolerance for frustration when their underlying dependency needs were not met. They were largely loners, having few friends, and often expressed feelings of inadequacy and anxiety in groups. These men viewed enlisting in the Army either as a way of escaping from problems at home that they were unable to resolve or an attempt to prove their masculinity and independence. When the military failed to meet their expectations, they became more despondent, focusing the reasons for this failure on external authority figures. The very fact that only 2 men in the sample had been drafted would support the view

that these men were seeking something in the military that they could never attain on their own.

The situation in which they found themselves in Viet Nam certainly contributed to their offenses. In combat areas, violence and assault are not only commonplace but also encouraged. Weapons are generally easily available, and the social inhibitions against their use that exist in communities at home disappear in a hostile environment. Further, the prevalence and openness with which the assault of superiors was discussed by the troops provided an atmosphere that approached positive sanction for such actions. In the support units to which most of these men were assigned, they were faced with boredom and monotony, with few or no means of relief. This inactivity created dysphoric feelings and frustration in these men, who relied on external factors for stimulation, which led to anger and rebellion. Another factor was that these men often had little job satisfaction because they had been assigned to positions for which they had not been specifically trained.

The sense of vulnerability reflected in the histories of these men and in the nature of their offenses is quite striking. Such factors as parental neglect and brutality, inadequate peer relationships, and failures in structured school situations combined with these men's stated reasons for enlistment reflect poor self-image and problems of self-sufficiency. Also indicative of feelings of inadequacy were their perception of the victim as a threat, their failure to warn the victims, despite the fact that others had, the belief that they had been scapegoated and singled out, and their need to discuss their intent with peers before the incident. Their fear of direct contact with a figure perceived as powerful is shown in the fact that these assaults were carried out under cover of darkness and without face-to-face contact. Finally, the choice of a weapon that is a powerful annihilating force would appeal to a person who perceives himself as powerless and inadequate.

Characteristically, these men chose to externalize their difficulties and to focus on others as being responsible for their failures. They did not acknowledge that their behavior might have invited the punitive actions from superiors that led them to feel scapegoated. They were disappointed in the military and felt that their immediate superiors had deprived them of something. Their peers reinforced these ideas but were able to limit their own expressions of discomfort to verbalizations. It is interesting that two-thirds of these men did nothing to avoid being caught, almost as if all of their problems could be solved if their perceived nemesis could be destroyed. They lacked feelings of remorse after the event since they had little insight into their own behavior.

THE LETHAL COMBINATION

The factors I have mentioned thus far were not unique to the Viet Nam war and thus do not totally explain the unprecedented frequency of fragging during this conflict. One factor that was unique to Viet Nam was the wide availability and use of a variety of drugs—in no previous war had drug use been so prevalent and pervasive. The combination of drugs and the specific personality factors of these men seems to be the most striking and significant finding. The readily accessible drugs provided an easy albeit temporary escape from daily anxieties and problems of adjustment for these men, who had few inner resources and sought stimulation in the external world through their drug use. Drugs were also a form of rebellion against superiors, but conflicts were created by threatened loss of availability and disciplinary action for their continued use. The officer was a threat to these men because he had the power to remove their means of escape and relief of anxiety.

All of the men in the sample reported using a wide variety of drugs with no discernible pattern, and 87.5% reported being acutely intoxicated at the time of the incident. It seems clear that drugs were essential factors in the assaults; they alleviated whatever anxieties or inhibitions the men had about committing the assault. The indirect assault seemed a way to obtain greater self-esteem and acceptance by a peer group of men who were largely loners, and the choice of this mode of attack avoided direct confrontation with an authority figure perceived as powerful.

CONCLUSIONS

One should always avoid extrapolation from this type of study on too large a scale. The sample consisted of men who had been convicted and confined for such assaults on superiors; obviously, given the overall incidence of fragging, they represented only a small fraction of such offenders. The reasons why these men were identified when others were not probably represents an important variable.

Nevertheless, a study of this group can provide some insight into the nature of individuals who would choose to perpetrate such assaults. These were men who had suffered brutality and separation from parents, who demonstrated difficulties with interpersonal relationships, and who endured deep feelings of insecurity and vulnerability. They externalized their problems to authority figures and had little ability to evaluate their own behavior objectively. The use of drugs alleviated some inner anxieties and enabled them eventually to assault a perceived enemy, yet they could not face the situation directly. Indirect assault with a powerful weapon became an easy alternative.

Although some drugs (e.g., amphetamines, alcohol, and occasionally hallucinogens) are reported to promote aggressive behavior, other drugs these men used do not (e.g., barbiturates, opiates). The drugs used were frequently taken in varied combinations and no discernible pattern was evident. What seems evident

from this study is that a wide variety of substances may act to relieve inhibitions and allow underlying aggressive impulses to surface. However, some inhibitions remain and this probably accounts for the indirect nature of the assaults.

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Occurrence of Psychiatric Disorder in a County Jail Population

BY GLENN E. SWANK, M.D., AND DARRYL WINER, M.A.

The authors report on a year's experience in providing psychiatric services in a county jail setting. Of 545 inmates evaluated, 22% were diagnosed as psychotic and 23% had a history of long-term or multiple hospitalizations. The authors discuss the implications of these data in terms of the problem of providing adequate psychiatric care for such a population.

THIS PAPER reports on 1 year's experience in providing psychiatric services to the inmates of Denver County Jail in Denver, Colo. By arrangement with the Northwest Denver Community Mental Health Center, also in Denver, psychiatric services were provided to the jail beginning in June 1974. This arrangement was funded by a grant[1] from the Colorado Division of Criminal Justice. Staffing consisted essentially of a half-time psychiatrist (G.E.S.), who was funded under the grant, and a part-time psychologist (D.W.), who worked on a volunteer basis. The goals of the program under the grant stressed diagnostic and referral services and crisis-intervention activities. During the year under study, we gathered data on the inmates' psychiatric histories and diagnoses.

THE FACILITY

The Denver County Jail is a large (capacity of 708 inmates), relatively modern (completed in 1956) facility serving the city and county of Denver, a geographically unitary municipality and county area with a population of approximately 574,000 (1). All persons (except juveniles 17 years of age or younger, who are under the jurisdiction of Denver County Juvenile Court) who are detained past an initial 24- to 48-hour holding period in the Denver City Jail are placed in the Denver County Jail. In addition to these persons, who are charged with a variety of offenses, those who are sentenced for up to 1 year on relatively minor (misdemeanor) offenses serve their sentences here. Those convicted on more serious (felony) charges are transferred to other institutions to serve their sentences.

In 1973, the latest year for which statistics are available, 12,453 persons (excluding those charged with public intoxication under a then existing statute) entered the jail (2). Of this number, 2,875 were serving misdemeanor sentences, 2,994 were awaiting trial on misdemeanor charges, and 2,506 were awaiting trial on felony charges. The rest consisted of federal prisoners in transit and so forth. There was a considerable overlap between the two groups of misdemeanants, since the majority of those serving misdemeanor sentences derived from those awaiting trial on misdemeanor charges. At the time of this study the average daily population of the jail was 550 inmates.

The jail had a 24-hour medical infirmary, which was staffed by registered nurses with daily physician coverage and backed by the facilities of a large city and county hospital (Denver General Hospital) with a special police holding ward. Psychiatric consultation had been previously available through this hospital, and a part-time psychiatrist had been regularly assigned to the police holding ward.

THE SERVICES

In accordance with the grant providing for psychiatric services at the jail, the psychiatrist and psycholo-

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[1]County Jail Diagnostic Services, Project 73-2C-(5)-C3-213, Colorado Division of Criminal Justice, State of Colorado.

gist, working as a team, engaged in the following activities:

1. Psychiatric diagnostic screening of as many jail inmates as possible. Inmates were seen for diagnostic evaluation upon the request of the medical or administrative staff of the jail, self-request by the inmate, or, when possible, routinely during classification procedures upon the inmates' entry into the jail. The inmates were evaluated by means of clinical interview.

2. Transfer of seriously mentally ill inmates to psychiatric treatment facilities when possible. In regard to inmates charged with relatively minor (misdemeanor) offenses, it was possible under state mental health statutes to arrange for transfer of jurisdiction from criminal courts to various psychiatric facilities in the area. However, for those inmates charged with more serious (felony) offenses, such direct transfer was not possible, although temporary hospital care was available through the police holding ward at Denver General Hospital. In addition, it was possible to recommend to the court involved that certain individuals be examined according to competency and criminal insanity statutes.

3. Treatment services at the jail as indicated, but with a particular emphasis on crisis intervention with suicidal inmates. Inmates who had threatened or attempted suicide were seen several times in brief, crisis-oriented psychotherapy. Other strategies included medication, transfer of inmates to other areas in the jail, intervention into various problems involving jail procedures, bonds, visitation, assignment of attorneys, and so forth.

DATA OBTAINED

During the year of our study, 445 inmates were seen by the team for psychiatric evaluation by way of referral or self-request. Obviously, these inmates represent a specially selected group (group 1). During the same period, 100 inmates were seen for psychiatric evaluation as they entered the jail in daily consignments. On these occasions all arriving inmates were seen, and hence this group (group 2) represents a more random sample. Table 1 presents the basic demographic and background data for the 2 groups. Table 2 presents information on psychiatric diagnosis by general category.

TABLE 1
Demographic and Background Data for Two Groups of Jail Inmates

Item	Group 1 (N=445)*		Group 2 (N=100)	
	Number	Percent	Number	Percent
Age (years)				
10–19	47	10.6	10	10.0
20–29	234	52.9	45	45.0
30–39	88	19.9	23	23.0
40 and older	73	16.5	22	22.0
Ethnic group				
Anglo	254	57.3	43	43.0
Black	106	23.9	24	24.0
Hispanic	75	16.9	27	27.0
American Indian	7	1.6	5	5.0
Oriental	1	0.2	1	1.0
Marital status				
Single	143	38.9	41	41.0
Married	75	20.4	27	27.0
Separated	15	4.1	6	6.0
Divorced	32	8.7	11	11.0
Widowed	8	2.2	1	1.0
Other/unknown**	95	25.8	14	14.0
Jail status				
Felon	184	41.4	71	71.0
Misdemeanant	167	37.5	27	27.0
Other***	94	21.1	2	2.0
Prior convictions				
Yes	253	56.9	70	70.0
No	67	15.1	16	16.0
Undetermined†	125	28.1	14	14.0
Psychiatric history				
None	127	28.5	64	64.0
Evaluation only	28	6.3	5	5.0
Outpatient/day care	37	8.3	5	5.0
Short-term inpatient care (less than 1 month)	64	14.4	9	9.0
Long-term inpatient care (more than 1 month) or multiple hospitalizations	124	27.9	5	5.0
Other institution	5	1.1	0	0.0
Undetermined†	60	13.5	12	12.0

*For the categories of age and ethnic group the numbers total slightly less than 445 because of a recording error; for the category of marital status the numbers total less than 445 because of cessation of recording this category.
**Primarily unspecified nonmarital liaisons.
***Includes immigration prisoners, U.S. marshall's prisoners, and evasive respondents.
†Large number in this category is apparently due to respondent evasiveness.

DISCUSSION

The number of psychotic persons (table 2) encountered in the jail was striking, as was the number with a history of psychiatric hospitalization (table 1), particularly long-term (more than 1 month) or multiple hospitalizations. The difference between the 2 groups of inmates, of course, only suggests that the referral process is reasonably successful. It is believed that there has been a marked increase in the number of seriously mentally disturbed individuals entering the jail in recent years, but unfortunately there are no earlier data available for comparison. At any rate, the number of such individuals noted in the period under consideration appears to be problematic; it may be related to the present manner of handling chronic psychiatric patients. Under the prevailing mental health philosophy in this region, long-term psychiatric inpatient care is essentially unobtainable except as a result of criminal commitment.

Of the jail inmates with a history of long-term psychiatric hospitalization, many had been state mental hospital patients. From our attempts to arrange psychiatric hospitalization for such persons, it was apparent

TABLE 2
Psychiatric Diagnosis of Two Groups of Jail Inmates

Diagnostic Group	Group 1 (N=445) Number	Group 1 (N=445) Percent	Group 2 (N=100) Number	Group 2 (N=100) Percent
Functional psychosis	102	22.9	3	3.0
Organic psychosis	15	3.4	2	2.0
Antisocial personality	65	14.6	13	13.0
Other personality disorder	90	20.2	16	16.0
Neurosis	11	2.5	2	2.0
Alcoholism	53	11.9	18	18.0
Drug addiction	38	8.5	6	6.0
Transient situational disturbance	26	5.8	3	3.0
Mental deficiency	12	2.7	1	1.0
Convulsive disorder*	10	2.3	1	1.0
Evaluation only; no diagnosis	18	4.1	36	36.0
Undetermined	15	3.4	0	0.0

*In addition to other diagnosis.

that the criminal justice system was most receptive to this whenever it was possible and that the system seemed to have inherited responsibility for these persons by default rather than preference. However, we were unsuccessful in removing even the most severely psychotic individuals from the jail for any substantial period of time. Some individuals returned to the jail 4 or 5 times (not counted as separate evaluations) in spite of being released to a hospital on each occasion. We feel it is tragic that such numbers of severely mentally ill persons are being left to be dealt with by a jail rather than by the psychiatric community.

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The Cessation of Marital Intercourse

BY JOHN N. EDWARDS, PH.D., AND ALAN BOOTH, PH.D.

The authors found that marital coitus had ceased for a definable period (median=8 weeks) in one-third of a sample of 144 men and 221 women who were relatively young and had been married an average of 11 years. An analysis of factors related to the social background and marital relationship of the respondents indicated that the cessation behavior of men is more highly predictable than that of women and that antecedents of this behavior differ markedly between the sexes. The authors suggest that, even among relatively young couples, marital intercourse is discontinous and problematic.

MARITAL INTERCOURSE is the only form of sexual behavior that is universally prescribed. All societies indicate that coitus between spouses is both a right and a duty (1). Since the presence and intensity of sexual activity is largely a function of the availability of a socially sanctioned partner, one would expect coitus in marriage to be relatively nonproblematic and very frequent in occurrence. However, a large body of literature—psychiatric, psychological, and sociological—attests to the fact that this is not the case. Problems abound, especially those of an individual nature, and the highest reported mean frequencies of marital intercourse (about 3 times a week among individuals 18–24 years old) are far below any theoretical limits (2).

Although the problematic character and relative infrequency of intercourse between spouses are clearly recognized in contemporary studies, certain aspects have been overlooked, e.g., the cessation of marital coitus, which has been investigated primarily in the elderly (3). Rather than being an abnormal phenomenon associated with, for example, chronic physical or mental illness or postpartum taboos, cessation of intercourse occurs in a sizable segment of the general married population, and marital intercourse, as our data

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will indicate, tends to be discontinuous for a significant proportion of couples.

Several questions can be raised concerning this finding. What are the antecedents of cessation behavior? Is the discontinuance of intercourse related to an individual's social background, or is the more immediate marital relationship responsible? Do men and women differ in the incidence of reported discontinuance of marital intercourse? If so, do the same factors explain their behavior? And finally, to what do such individuals attribute the cessation of intercourse, and are the reasons given the same for men and women?

METHOD

Sample

The data in this study, which was conducted in 1973, come from a stratified probability sample of men and women in Toronto, Ont., Canada. The subjects were relatively young—2% were under 20, 74% were 20–39 years old, and 24% were over 40. The length of time married ranged from 1 year to more than 20 years, with a mean of 11 years.

All individuals interviewed were part of intact families of European or North American descent with one or more children. The wives in all families represented were under 45 years of age. The men and women were given a 2-hour field interview and a medical examination. At the close of the medical examination, the physicians, who had received extensive training in interview techniques, asked a series of questions regarding sexual behavior. A total of 221 women and 144 men, some of whom were married to each other (N=124), were interviewed and examined. A systematic comparison of the characteristics of those consenting to be both interviewed and examined, who comprised two-thirds of the original sample, with those who did not consent revealed that the two groups were similar with respect to occupational status, age of head of household, and length of residence in present dwelling. The major difference was that many of the nonrespondents had migrated from Western Europe.

Variables Examined

Cessation of intercourse. The physician interviewers asked whether intercourse between the respondent and his/her spouse had ever stopped for any reason other than pregnancy and, if so, why this had happened. These queries were followed by a question regarding the length of cessation.

Background variables. The background variables examined in this analysis were 1) age, 2) occupational status of the head of the household according to the Blishen Index (4), a standardized scoring system for the prestige rankings of Canadian occupations, 3) level of educational achievement, 4) ethnicity of respondent and spouse (i.e., Canadian born or not), 5) religion (Catholic or non-Catholic), 6) whether the respondent had resided in a large city (population of more than 500,000) as a child, and 7) current employment status of wife.

Marital variables. The marital variables included such demographic factors as number of years married, number of children, and whether the individual had ever been divorced.

Six attitudinal factors were explored. The first examined which partner dominated the pair. Respondents were asked, "When you disagree with your wife/husband, who gets their way?" The responses "husband always" or "husband mostly" were categorized as husband-dominated; comparable responses for the wife were coded as wife-dominated. Second, two items were used as a perceptual index of affection between the married persons: "My wife/husband is just as loving as she/he used to be" and "My wife/husband is more critical of me than she/he used to be." An "agree" response to the first item or a "disagree" response to the second was scored 1; other responses were scored zero. "Don't know" was treated as missing data in this and all other items. If a response to one or both questions indicated a decrement in love, the response was so coded. The number of disagreements between the spouses in the preceding 12 months was determined from an inventory of arguments involving family members. The initial question read, "In many households bad feelings, arguments, or fights occur from time to time. Do bad feelings, arguments, or fights ever arise in this household?" An affirmative response was followed by a detailed set of questions regarding the participants, frequency, and topics of arguments. Fourth, we determined whether either member of the pair had threatened to leave the other as an indicator of the quality of the couple's relationship. ("A lot of people have quarrels with their husband/wife and get so angry that they ask them to leave home or they threaten to leave home themselves. Has this ever happened in your marriage?")

The individual's general feeling of alienation was the fifth attitudinal variable, and the sixth was whether a lack of privacy in the home had recently prevented the respondent from having sexual intercourse.

Data Analysis

The impact of the background and marital variables on the dependent variable, cessation of marital intercourse, was examined by means of multiple regression. By entering one set of variables before the other, we are able to ascertain the unique variance explained by each set of variables as well as their shared variance. The standardized regression coefficient (beta) represents the effect each variable has on the dependent variable, cessation of coitus, with the effects of all other factors held constant. Within the sample, beta may be interpreted as a measure of the importance or usefulness of a variable in accounting for variation in the dependent variable (5). For example, a beta of .30 in this sample indicates a highly significant predictor of cessation and is twice as useful in accounting for cessation than a variable for which a beta of .15 is obtained.

RESULTS

One-third of the respondents (32% of the men, N=46, and 36% of the women, N=80) reported that they had ceased having intercourse with their spouse for some definable period. The median length of cessation was 8 weeks. It is immediately apparent from the data in table 1 that the behavior of men is better accounted for by the variables we examined than is that of women. As table 2 indicates, 23% of the total variance in the cessation behavior of men as opposed to 13% in women is explained by the background and marital variables.

The factors that best explain cessation clearly differ for men and women. For men, the background variables have a substantial effect on the tendency to stop having intercourse. Crucial background variables for men are recent emigration from Europe, being non-Catholic, and current lack of employment of the wife. On the basis of these data, the marital situation evidently has little impact on the man's decision to discontinue marital coitus.

The findings are just the opposite for women; their cessation behavior is most critically influenced by conditions of the marital relationship. In particular, the wife's perception that her husband is dominant in family decision making, her belief that he has become less affectionate, and the occurrence of threats to leave home were significantly related to cessation of intercourse.

The only common factor that explains discontinuance of sex for both men and women is a perceived lack of privacy. Whether the lack of privacy actually intervened or merely provided a convenient rationale for stopping the sexual relationship is open to debate. The evidence presented in table 3 on self-reported reasons for cessation appears, however, to support the latter interpretation.

The self-reported reasons for the cessation of marital intercourse were varied, but they tend to fall in the eight categories given in table 3: surgery (e.g., hernia repair, hysterectomy, cholecystectomy), illness (e.g., vaginitis, stroke, unspecified ailments), psychiatric impairment (e.g., depression, nervous breakdown, alcoholism), marital discord (e.g., angry at mate, spouse "playing around"), decreased sexual interest, menstruation, birth control procedure, and geographic separation (e.g., spouse working in different city, shift work, lack of privacy in the household). Obviously, the categories are not mutually exclusive or independent of causal linkages. For example, marital discord and lack of interest in sex may overlap, and psychiatric impairment may be a precursor or a consequence of marital discord. The categories merely represent the clusters into which the responses seem to fit without straining the meaning of the respondents' replies.

The reason given most often for cessation was marital discord. The importance of this variable is further highlighted by the fact that 52% of those who had stopped having intercourse for this reason also indicated that their spouse was less loving than he/she used to be, whereas only 30% of the individuals who reported cessation for some other reason gave this response. Following marital discord in terms of frequency were illness, decreased sexual interest, and surgery. It is noteworthy that the respondents who reported cessation because of a decreased interest in sex were an average of 3 years older than individuals who gave other reasons. Psychiatric impairment was the fifth most frequent reason given for cessation. In contrast to the analysis of background and marital variables, the self-reported reasons for cessation were quite similar for men and women.

Almost three-fourths of the individuals who attributed cessation of marital intercourse to decreased inter-

TABLE 1
Factors Investigated in Relationship to Cessation of Marital Intercourse

Factor	Beta	
	Men (N=144)	Women (N=221)
Background variables		
Age	.01	−.03
Occupational status	.09	.03
Education	.00	.00
Wife's ethnicity	−.27*	−.01
Husband's ethnicity	.30*	−.09
Religion	−.13*	−.08
Urban residence as child	−.06	−.08
Wife's employment status	−.11*	.03
Marital variables		
Years married	.09	.09
Number of children	−.02	.03
Ever divorced	.02	−.05
Female-dominated couple	−.10	.08
Male-dominated couple	.09	.11*
Decrease in affection	−.02	.14*
Marital arguments	.02	.04
Threat to leave home	.07	.14*
Alienation	−.02	.01
Lack of privacy	.25*	.09*

*Significantly related to cessation of intercourse ($p \leq .05$).

TABLE 2
Percentages of Variance Explained by Background and Marital Variables

Variance	Men (N=144)	Women (N=221)
Total explained by all variables considered	23	13
Explained by background variables	8	2
Explained by marital variables	9	9
Shared by marital and background variables	6	2

TABLE 3
Self-Reported Reasons for Cessation of Marital Intercourse

Reason	Women (N=80)		Men (N=46)		Total (N=126)	
	N	%	N	%	N	%
Surgery	7	9	6	13	13	10
Illness	15	19	10	21	25	20
Psychiatric impairment	6	8	4	9	10	8
Marital discord	34	42	16	35	50	40
Decreased interest in sex	9	11	6	13	15	12
Menstruation	3	4	2	4	5	4
Birth control procedure	4	5	0	0	4	3
Geographic separation	2	2	2	5	4	3

est in sex, birth control procedure, or geographic separation reported that the cessation had lasted 3 months or more. Sixty percent of those who cited psychiatric impairment reported lengthy cessation, followed by 46% in the surgery category, 30% for marital discord, and 16% who gave illness as the reason for having stopped intercourse. It is interesting to note that, as prominent as marital discord was in the other analyses, it ranked sixth in terms of the percentage of individuals within the eight categories who reported lengthy cessation.

SUMMARY AND CONCLUSIONS

One-third of this stratified sample of relatively young men and women who had been married for an average of only 11 years had ceased marital coitus for a definable period. Since the median length of cessation was 8 weeks, it seems that coitus may be highly discontinuous for many married couples.

The cessation behavior of men is more highly predictable than that of women in terms of factors related to social background and the marital relationship. Moreover, the background and marital variables that best explain sexual cessation differ markedly between the sexes: social background factors have a far more substantial effect on the tendency of men to cease intercourse than do factors related to the marital situation, whereas the reverse is true for women. Only a perceived lack of privacy is predictive of the cessation of intercourse for both men and women. It is interesting to note, however, that only small, nonsignificant differences were found between men and women with regard to self-reported causes of cessation of marital intercourse.

It appears, on the basis of these findings, that we need to reexamine the assumptions that are often made as to how efficacious the societal prescription of marital coitus is and what level of sexual activity may be considered as within a "normal" range. Assuming that the respondents in this study are representative (and, given our sampling techniques, there is no reason to question that they are not), discontinuous intercourse is an experience of a sizable proportion of the population and implies, at least under certain circumstances, that the obligatory nature of marital coitus is abrogated, sometimes for rather extensive periods of time. However, inasmuch as most of the self-reported reasons for cessation point to situations amenable to intervention, the findings also call into question our awareness of the situation and the remedial possibilities that exist. Certainly, psychiatric impairment and marital discord are obvious to practitioners. Discontinuous marital intercourse, whether it be cause or effect, should command greater attention.

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Digit-Symbol Performance in Methadone-Treated Ex-Heroin Addicts

BY PHILIP W. APPEL, PH.D., AND NORMAN B. GORDON, PH.D.

The digit-symbol substitution task (DSST) of the WAIS was given to working (MW) and nonworking (MNW) patients on high-dose methadone maintenance and to two comparison groups to assess the function of attention in these patients. Mean DSST scores were significantly lower for the MNW group than for the other three groups, which did not differ. However, the scores for the MNW group were within the normal range. DSST scores and length of methadone treatment (range: 11 months to 8 years) were positively correlated, providing no evidence of deterioration with increasing duration of treatment.

INTEREST IN the attentional function of methadone patients, the focus of the present study, was stimulated by reports of drowsiness even after extended periods of maintenance. Mild sedative and tranquilizing effects have also been reported (1). Although methadone patients perform adequately on psychomotor and intellectual tasks (2), the available evidence suggests that components of their attentional function might be affected and should be investigated.

The digit-symbol substitution task (DSST) of the Wechsler Adult Intelligence Scale (WAIS) was used to assess attention in patients who had been receiving blocking doses of methadone (80–120 mg) daily for about a year or more. Ex-heroin addicts who had been drug-free for at least 1 year and individuals with no history of narcotic drug dependence served as comparison subjects.

We used the DSST in this study because it has been employed extensively to evaluate the effect of psychotropic drugs (3) and because its performance requires the subject to activate himself, to be alert, and to selectively sequence the execution of simple cognitive and psychomotor activities under the pressure of time. The individual's score is the number of symbols correctly substituted in 90 seconds.

Working (engaged in productive activity) and nonworking groups of methadone patients were tested. Subtle differences in auditory reaction-time (RT) performance between these groups had been found (2), and possible differences in their DSST performance, although of secondary interest, were explored.

METHOD

Data were obtained from 4 groups of 24 subjects: 1) working methadone patients (MW), 2) nonworking methadone patients (MNW), 3) working, drug-free former heroin addicts (DF), and 4) working individuals with no history of narcotic drug dependence (ND). All subjects were men between 25 and 40 years old. The mean ages, in years, were: MW, 31.9±6.1; MNW, 33.0±4.6; DF, 30.1±5.0; and ND, 30.0±5.2. The methadone patients had been receiving blocking doses of methadone daily for 11 months or more at the time of testing (range=11 months to 8 years, mean=2.55 years). Subjects in the DF group had been abstinent from illicit opiates and other drugs of abuse for at least a year.

"Working" was defined as full or part-time employment and/or regular attendance at school, i.e., regular productive activity that was not necessarily gainful. Subjects in the MW, MNW, and DF groups had a minimum addiction history of 2 years. Length of opiate addiction was defined as the cumulative total of periods of daily multiple self-administrations of illicit opiates excluding time spent in jail or prison, in the hospital, in detoxification, in other treatment, or in voluntary abstinence.

We did not test individuals who were receiving a prescribed psychotropic drug or who were likely to have a neurological problem based on self-reports of head or brain injury or of frequent drug overdoses. As part of the screening procedure, each subject was interviewed in detail about drug history, medical history, and waking activities and was given the Cornell Medical Index (4).

The methadone patients came from treatment programs of Beth Israel, Mount Sinai, and other New York City hospitals. The drug-free ex-addicts were obtained from Phoenix House and Horizon Center,

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The conclusions expressed herein are those of the authors and do not necessarily reflect the views of the Commission.

which are abstinence-oriented residential drug treatment programs, and were largely high- and middle-echelon paraprofessional staff. The subjects in the ND group were evening college students comparable in background to the patients and nonprofessional staff members of Beth Israel Hospital. Apart from the selection criteria and the age homogeneity of the four groups, subjects were not matched. Information on ethnicity, level of education, and occupational status is reported in detail elsewhere (5).

Task

The digit-symbol substitution task is a paper-and-pencil subtest of the WAIS (6) and is typically used in assessing the performance component of IQ. The DSST has also been used to assess possible functional deficit arising from brain damage or psychotropic drug effects (3).

At the top of the test blank is the digit-symbol code, which consists of a row of 9 boxes. In the upper halves of the boxes are the numbers 1 thru 9, from left to right. In the lower half of each box is a mark or symbol (e.g., a circle, equal sign, inverted T) for each number. The response portion of the test blank consists of 4 rows of 25 boxes, 10 for practice and 90 for actual performance. The numbers are arranged in the upper halves in a somewhat systematic sequence; the lower halves are blank. The subject's task is to fill in the mark or symbol in the lower half that goes with the number in the upper half by consulting the code and to do this for each box consecutively until the 90-second time limit is exhausted.

Design and Procedure

Gordon and Appel (2) found that working and nonworking methadone patients showed differential changes in auditory RT performance across two testing sessions. Thus, we were interested in comparative changes in DSST performance between patient groups. All subjects were given the DSST twice, with approximately a week between the first and second testing. Half of the subjects in each group received the original version of the DSST on their first testing and the other half received an alternate form. On the second testing, the procedure was reversed. The alternate form of the DSST was constructed by selecting a random permutation of the symbols in the digit-symbol code. The numerical sequence of the digits on the response portion of the test blank was not changed.

Testing was done in a quiet room, and the subjects were given standard instructions from the WAIS manual (6). The two testings for a given subject were at approximately the same time of day (within the hour); times of testing varied across subjects. Subjects were paid $5 for each testing session, in which the DSST was the first of several tasks administered.

After each session, a urine specimen was taken from every subject and analyzed for the presence of opiates, methadone, quinine, amphetamines, barbiturates, and cocaine. The technicians who performed the analyses were informed that some of the specimens were from methadone patients. Subjects with inappropriate positives on urinalysis are not included in the results.

RESULTS

The means and standard deviations of the raw DSST scores indicated that the original and alternate forms of the task were equivalent. The largest difference between mean scores on the two tests was 2.4 in the MW group (SDs=10.5 and 7.5 for the original and alternate forms, respectively).

A Groups × Testings analysis of variance was performed to evaluate possible differences between groups and across sessions. There was a significant difference between groups, $F(3, 92)=8.13$, $p<.01$, a consistent increase in scores from test 1 to test 2, $F(1, 92)=105.58$, $p<.001$; and a marginally significant Groups × Testings interaction, $F(3, 92)=2.75$, $p<.05$.

Comparisons between groups were done with Newman-Keuls tests (7). On both testings, there were no significant differences between the MW, DF, and ND groups. The means of each of these groups, however, were significantly higher than that of the MNW group ($p<.05$). When the scores for subjects in the MNW group were converted to T or scaled scores, they were within the normal range according to WAIS norms.

To examine the Groups × Testings interaction further, a one-way analysis of variance was performed with each subject's change score (from test 1 to test 2) as the dependent measure. The results were not significant, $F(3, 92)=1.60$, $p<.10$. The interaction apparently reflects a slightly greater rate of increase in DSST score for the MW and DF groups compared with the ND group. The mean change scores for the MW, DF, and ND groups were 6.2, 6.5, and 3.7, respectively.

Because there was considerable variation in the lengths of maintenance for the patients, the relationship between DSST score and duration of methadone treatment was examined. Correlations between the number of months on methadone maintenance and raw DSST score on the first testing were computed for the working patients, the nonworking patients, and for patient groups combined. The value of r for the MW group was +.375 ($df=22$, $p<.05$); for the MNW group, +.215 ($df=22$, $p>.10$); and for all patients, +.296 ($df=46$, $p>.05$). These results do not provide evidence that cognitive attentional functioning deteriorates with increasing duration of methadone treatment.

DISCUSSION

Our results are consistent with previous data, which, in general, show normal intellectual and psychomotor functioning among methadone patients (2). Although the DSST scores of the nonworking patients were significantly lower than those of the working

patients and the comparison groups, they were within the normal range when converted to scaled scores.

Indefinite maintenance on methadone would be seriously contraindicated if the chemotherapy were associated with deterioration in cognitive capabilities. The three correlations between DSST scores and length of time on maintenance were positive, and two of the three were statistically significant. These results are important because 1) they indicate that with respect to the capacities required for DSST performance the effects of increasing duration of methadone treatment are at least neutral, and 2) as one of the so-called don't hold subtests of the WAIS, the DSST is considered to be sensitive to deteriorative changes (8), which enhances the credibility of the inference of "no decrement." That any of the correlations would be significantly positive was unexpected; however, further comment about this finding is beyond the scope of this study.

The overall DSST results and the correlational data have implications for the rehabilitation of methadone patients. They suggest that adverse effects of chronically administered methadone on cognitive psychomotor functioning are the least likely source of potential difficulties. More likely but often overlooked sources are the civic liabilities and stigmatization associated with the status of "methadone patient." Data presented elsewhere (9) extensively document the administrative, legal, and social barriers and the often capricious personnel policies faced by methadone patients. We are not suggesting that psychopharmacological studies with patients be deemphasized, but rather that there are substantial environmental obstacles to the effective functioning of patients, while the dysfunctional effects of methadone as a chemotherapy are minor.

The finding that the raw DSST scores of the nonworking patients were significantly lower than those of the other groups was unexpected. One possible explanation is that working individuals perform slightly better on the DSST than do nonworking individuals, but this could not be evaluated since unemployed comparison groups were not tested.

Certain characteristics of the lives of many nonworking patients and informal remarks made by several of those tested suggest additional hypotheses. For example, demographic studies (10) have identified a significant minority of the patient population who are acceptably retained in treatment but are unwilling or unable to obtain work or training and who occupy a disproportionate amount of staff time. Such patients appear to have difficulty in mobilizing themselves for virtually any kind of conventional achievement, and the lower DSST scores of the nonworking patients may in part reflect this in a specific performance situation. Given the bleak life situations of many nonworking patients, it is possible that some of these subjects were depressed, and depression and low DSST performance have been reported to be significantly related (11).

Another hypothesis is that some of the MNW subjects were overly aroused or anxious and therefore experienced increased difficulty in the selective control of attention and distractibility (12), which can disrupt DSST performance (13). Despite the experimenter's disclaimers, several nonworking patients expressed apprehension that "poor" performance might in some way jeopardize their employability. Other subjects expressed an equally mistaken but more positive notion, namely, a feeling that if they performed exceptionally well there would be more job opportunities for them. Furthermore, the sheer novelty of participating in the study may have been motivating in itself—several nonworking patients readily acknowledged that the study was "something different" and "something to do." Thus, several important sources of motivation were engaged by the study, and in combination they may have produced overly high levels of arousal for some nonworking patients, with resulting mildly diminished DSST performance.

CONCLUSIONS

There were no indications that the attentional function of methadone patients is adversely affected by high doses of methadone administered in a maintenance schedule. Furthermore, the correlational data indicated that increasing duration of methadone treatment did not adversely affect attentional function.

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Portable Electromyograph Monitoring of Unilateral ECT

BY JOHN O. IVES, M.D., LELON A. WEAVER, PH.D., AND RONALD WILLIAMS, PH.D.

The authors describe a portable electromyograph (EMG) designed for use in monitoring unilateral ECT. Administration of muscle relaxants in conjunction with ECT often makes it difficult to determine that an adequate response has been elicited. The authors feel that this adaptation of the EMG provides a useful and easy means of monitoring the presence, bilateralism, and length of the seizure.

ECT IS ONE OF the standard treatments in psychiatry. It involves the application of an electrical current to the head, which induces a typical grand-mal seizure. Because of the musculoskeletal complications of this seizure it is now standard practice to administer ECT after the patient has received barbiturate anesthesia and muscle relaxants such as succinylcholine. A further refinement of the technique has been to apply the electrical current unilaterally to the nondominant hemisphere, thereby reducing the transient memory dysfunction that often follows ECT (1–3).

These refinements in technique occasionally cause certain complications in the administration of ECT. It is generally accepted that a bilateral tonic-clonic seizure must take place if maximum treatment benefit is to be obtained (2–4). However, the use of muscle relaxants often makes it difficult to determine that an adequate response has been elicited. It is particularly difficult to determine that the seizure is bilateral, since movements of the trunk can produce passive movements of the limbs that are similar to movements due to muscle contractions.

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METHOD

In order to overcome these difficulties, a portable electromyograph (EMG) was developed that can be easily applied to the patient's calf muscle just prior to treatment. It consists of a differential follower input stage, a high-gain difference amplifier circuit, a filtering section, and an output power amplifier driving an audio speaker. The EMG is battery operated to avoid accidental ground loops from other electrical equipment.[1] It measures 10.2 cm by 15.2 cm by 20.3 cm and thus is small enough to be placed on the bed next to the patient. It takes less than a minute to apply.

When the apparatus is connected to a normal, resting muscle it emits a sound of moderate intensity. When the succinylcholine begins to depolarize the muscle an intensification of this sound occurs, at which time muscle fasciculation is often clinically apparent. After a few seconds this fasciculation stops and the apparatus becomes silent, indicating that the muscles are relaxed and the patient is ready for the treatment. When the treatment is applied a short burst of sound indicates passage of the stimulating current; this is followed by a short latent period and then a sustained loud sound that indicates the tonic phase of the seizure. This sound can be heard even though the patient's muscular activity may not be readily apparent. After the tonic phase of approximately 10 seconds, the clonic phase occurs, characterized by intermittent bursts of sound and followed by a silence at the end of the seizure. Since the current is applied to one side of the head and the apparatus is applied to the ipsilateral leg, proof is obtained that the seizure is indeed bilateral. The tonic and clonic phases can also be easily timed by listening to the apparatus.

[1]Details of the electromyograph's construction are available from the authors on request.

DISCUSSION

A number of the methods of monitoring the progress and use of ECT have been reported in the literature. The most widely known method is that of Blachly and Gowing (5) who followed the course of multiple ECT with EEG and EKG monitoring. They reported that EEG evidence of convulsive activity persisted long after muscular evidence of a seizure stopped. Since EEG monitoring is crucial in multiple ECT, it follows that EMG monitoring alone is not sufficient for this purpose. However, while EKG and EEG monitoring is required for multiple ECT, it is usually not necessary in cases where a single session of ECT is given, except in those cases where cardiac complications are present.

Holmberg (6) discussed the use of an EMG to monitor the length and intensity of the convulsions produced by a standard ECT stimulator used in conjunction with the administration of oxygen. Inman and associates (7) used the EMG in a relatively similar way. In both of these cases the EMG was large and cumbersome, and while it would be useful for research purposes it would not be so useful for clinical purposes. Since our apparatus is small and easily applied, it is more readily adapted to clinical use. Articles in both the scientific literature (8) and in the lay press (9) have documented the occasional unreliability of ECT instruments. Because of this problem an external monitoring source that documents the presence, bilateralism, and length of the seizure is of clinical relevance.

We therefore feel that this adaptation of the EMG is a useful means of monitoring unilateral ECT modified with muscle relaxants.

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IN MEMORIAM

George Herbert Stevenson 1894–1976

DR. GEORGE H. STEVENSON, a former President (1940–41) of the American Psychiatric Association and one of the founders of the Canadian Psychiatric Association, died in Florida on June 1. With his death the psychiatric community lost a scholar and a humanitarian who devoted his professional life to mental hospital administration and preventive psychiatry.

Born in Toronto, he moved with his family to Hamilton, where he completed high school. His heart was already set on a medical career, but since he was only 16 and needed money to finance his medical studies he worked for 2 years in a variety of jobs. He entered the medical school at the University of Toronto in 1912. His medical education was interrupted by World War I: he enlisted in the Canadian army in 1915. He spent the next year as a medical attendant in a military hospital in Salonika. Urged by the authorities to complete his medical education, he returned to Canada and graduated in 1918. He was then posted to the medical staff of a military mental hospital in Newmarket, Ontario. After the war he joined the Ontario Provincial Mental Hospital Service. Given leave for postgraduate study, he studied briefly at Harvard in 1920, and in 1927, with the help of a Rockefeller Fellowship, he worked in Boston and Baltimore. On his return he became Medical Superintendent of the Ontario Hospital at Whitby, where he remained for 7 years. Interested in the psychiatric role of the nurse, he developed a graduate course for nurses in psychiatry—the first in Canada.

In 1934 Dr. Stevenson moved to London as Superintendant of the Ontario Hospital and Professor at the University of Western Ontario. During the next 18 years he developed an international reputation as a psychiatric specialist. He became president of the London Academy of Medicine, the county medical society, and the London Canadian Club. He was a fellow of the Royal Society of Canada and served on the executive boards of numerous other associations.

He held many positions in the American Psychiatric Association, including being a member and then chairman of the Committee on Nursing and the Public Education Committee. After serving as APA President in 1940–41, he organized and chaired the Committee on International Relationships. For 7 years he represented the APA on the American Board of Psychiatry and Neurology and was an ex-officio member of the APA Council (Board of Trustees) until his death.

In Canada he chaired an interim committee that worked for several years toward the organization of a national psychiatric association. He chaired the inaugural meeting of the Canadian Association in Montreal on June 20, 1951.

Taking an early retirement from the Ontario Hospital Service in 1952, he directed a major study on drug addiction for the province of British Columbia. In 1956 he moved to Hawaii to begin a second career as a community psychiatrist and a consultant to both the state hospital and the School of Social Work at the University of Hawaii. In 1969 he returned to Canada, but after suffering a stroke in 1970 he entered a nursing home in Florida, where he remained until his death.

The major thrust of Dr. Stevenson's professional career was mental hospital administration. His experience in Canada made him sensitive about political interference in this field. Years before such ideas were common he urged that mental hospitals be administered by local boards of management. He strongly advocated the development of community psychiatric clinics and psychiatric units in general hospitals.

His therapeutic approach was eclectic. He was irritated by the cultism he perceived in the competing schools of psychotherapy, believing that one type was pretty much as effective as another. However, he was interested in innovative forms of treatment and prevention. One of his major contributions was the use of maintenance ECT to prevent recurring manic-depressive attacks long before the introduction of lithium.

In his teaching, Dr. Stevenson constantly emphasized the necessity of respecting the dignity of the patient. He insisted that patients be addressed by their proper names and never tolerated the use of derogatory terms such as "lunatic" or "crazy" in his presence. He rejected the auditorium lecture-demonstration as a method of teaching medical students and instead used small bedside teaching clinics. He was committed to the integration of psychiatry with general medicine and the behavioral sciences.

His presidential address was delivered as the United States was entering World War II. In it he stressed his conviction that war was a major psychiatric public health disaster. He felt very strongly that psychiatrists could do much more than they had in the past to prevent war. Only toward the end of his career did he reluctantly come to the conclusion that probably psychiatrists would be better advised to stick to what they knew and did best—treating mentally sick patients and trying to prevent mental illness.

The last time I talked with Dr. Stevenson was in Florida several months before his death. Our conversation reminded me of something he had written some years before:

> As there is so little time and so little opportunity in our tense high pressure world for dreams and for relaxation, I commend the armchair to my readers. . . . In such an armchair your old men might dream dreams and your young men might see visions. (1, p. 82)

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JOHN D. GRIFFIN, M.D.



GEORGE HERBERT STEVENSON, M.D.

LETTERS TO THE EDITOR

Craft Versus Profession in Alcoholism Treatment

SIR: In "The Future of Alcohology: Craft or Science?" (June 1976 issue), Melvyn Kalb, Ph.D., and Morton S. Propper, M.S.W., suggested an inherent conflict between the professional-scientific perspective on alcoholism and the craft-like role of the nonprofessional therapist. In actuality, difficulty in achieving active collaboration between the two groups results much more often from power politics than from genuine incompatibility. For example, in the university-based alcoholism program that I direct, where final control resides in a multidisciplinary, eclectic faculty, patients may attend Alcoholics Anonymous (AA) meetings in the clinic while also participating in traditional psychotherapeutic counseling or pharmacotherapy. Our counselors, many of whom are active AA members, are flexible about the issue of abstinence, and patients are involved in an active self-help therapeutic program with strategic intervention from professional staff.

Professionals have much to gain by adapting techniques from the nonprofessional self-help groups, which clearly have effective therapeutic measures at their disposal. After a careful review of studies on AA, Baekeland and associates (1) concluded that the organization produces an overall improvement rate comparable to that of professionally directed programs. Future studies may help define the actual vehicles of improvement in self-help settings so that these approaches may then be applied in clinics. For example, we examined the marked decline in alcohol and drug use in a charismatic religious sect and ascertained by multiple regression analysis that specific facets of social cohesiveness and meditation practice were "treatment" variables that best predicted positive outcome (2).

Given the increasing demand for alcoholism services, it seems important for professionals to develop new means for utilizing nonprofessional self-help techniques, rather than defining conflicts between the two groups as insoluble.

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MARC GALANTER, M.D.
Bronx, N.Y.

SIR: The article by Dr. Kalb and Mr. Propper brings important issues to the surface and accurately defines many aspects of the relationship between some paraprofessional counselors and some mental health professionals in the field of alcoholism treatment. The brush, however, sweeps too broad in treating the two fields as unified, opposing bodies. In addition to the conflicts between professionals and counselors, each group faces considerable diversity of emphasis and orientation within itself.

The authors conclude that alcohology will have to choose between counselor or professional lines because the two models cannot coexist. That is not my experience. The key to their coexistence is the proper assignment of roles. The professional should define the patient's problems and prescribe the overall treatment approach. When patients are properly assigned to counselors, many will be helped. It is not necessary to ask either the counselor or professional to lose face or faith. Just as the architect and the carpenter both have roles in the building of a house, the professional and the counselor both can have roles in the reconstruction of the life of the alcoholic.

ROGER PEELE, M.D.
Washington, D.C.

SIR: Dr. Kalb and Mr. Propper state that combining a craft approach and a scientific line "prevents growth and progress." This has not been my experience at the Oregon Alcohol Treatment and Training Center over a 10-year period. Among the helpful adjuncts in our program is the requirement that professionals and paraprofessionals attend weekly journal clubs, in which clinical material from *all* sources is presented and discussed, and staff meetings wherein clinical decisions are made concerning patients. This is a maturing process. At times, a paraprofessional might be more in favor of using disulfiram or other medication than the professional.

I would also point out that "folk science" is not practiced solely by the craft group. I have chosen the following from many possible examples. An alcoholic patient remarked that in his two years in psychoanalysis the analyst felt that if the patient stopped drinking, the true nature of his problems could not be analyzed. Today, this patient is on disulfiram, is making good progress in therapy and has stated, "Psychoanalysis would never have worked for me."

EDWARD M. SCOTT, PH.D.
Portland, Ore.

Dr. Kalb and Mr. Propper Reply

SIR: Drs. Scott and Galanter cite their own alcoholism programs as examples of settings in which active collaboration between professionals and paraprofessionals exists without the strains referred to in our article. However, both of these programs are examples of professionally oriented clinics. Drs. Scott and Galanter are nationally recognized authorities who undoubtedly exercise considerable discretion in the selection and training of their staffs. These programs can hard-

ly be taken as representative of the vast majority of alcoholism treatment clinics in this country.

Also, as we noted in our article, the issue is not the relative effectiveness of professionals and paraprofessionals in the treatment of alcoholism. Our intention was to explore the problems inherent in the integration of the results of empirical research within a craft-oriented treatment structure and to consider the implications of these problems for the present and future of the alcoholism treatment effort as a scientifically based enterprise.

Dr. Peele stresses the differential roles and responsibilities of the professional and paraprofessional as "the key to their coexistence." He asserts that "The professional should define the patient's problems and prescribe the overall treatment approach." To the extent that such a situation obtains, we would agree that compatability is possible and desirable. However, it is precisely the *lack* of such clear role differentiation that characterizes most treatment settings and engenders the problems we have addressed.

We quite agree with Dr. Galanter that the field is hampered by "power politics" rather than being an open marketplace of ideas. Pattison has said,

> the field of [alcoholism] treatment is dominated by paraprofessional values, attitudes, and concepts. This is now leading to an ideological conflict between the established paraprofessional approach to treatment and new scientific approaches to treatment. (1)

The recent diatribes in the public media against the authors of the Rand Corporation study "Alcoholism and Treatment" (2) demonstrate what a "maverick" professional must be prepared to encounter. The report was described as a "cruel hoax" by representatives of the National Council on Alcoholism, who acknowledged that they had not even seen it before making their denunciation (3, 4).

Our article addressed the issue of ethics and responsibility in the treatment of those who choose to seek help from a nominally professional establishment. We do not doubt that some paraprofessional counselors have much to offer or that the integration of professional and paraprofessional efforts is much to be desired. However, the historic inertia of clinical alcohology in the face of empirical research findings forces us to a consideration of the immediate and long-term effects of the current marriage of craft and scientific perspectives.

We note that Drs. Scott, Galanter, and Peele do not question those assertions in our article which are of central import, for example, our statement that "Research is not used, as in other fields, as a springboard for developing and testing new hypotheses and abandoning old ones that are empirically disproved." In a vividly illuminating work, Rossi and Filstead (5) addressed many of the same issues.

Problems in integrating research findings into the mainstream of clinical practice exist, as Drs. Scott, Galanter, and Peele tacitly acknowledge. If our article serves to bring these problems into sharper focus and to stimulate dialogue, we will have accomplished our goals.

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MORTON S. PROPPER, M.S.W.
MELVYN KALB, PH.D.
Sunnyvale, Calif.

A Therapeutic Example

SIR: The article by Bernard L. Greene, M.D., and associates on "Marital Therapy When One Spouse Has a Primary Affective Disorder" (July 1976 issue) describes a problem often encountered in the practice of child and family therapy, namely, the parent-spouse in a PAD crisis creating family disequilibrium that may be manifested in symptoms in a child and/or in marital problems. The nonafflicted spouse must bear a major burden in the restoration of family equilibrium during these episodes. Strong support from the therapist is essential in interrupting the interpersonal cycle that frequently occurs in these situations. The non-PAD spouse is simultaneously induced into and rejected from the role of nurse or therapist by the PAD-afflicted spouse, who withdraws and declares him/herself dysfunctional. Neither retains the capacity or authority for the regulation of distance or involvement, and both threaten either suicide or leaving the home. At this point, the therapist as legitimate authority is needed to "prescribe" proper regulation of distance and involvement.

In one such case I recently saw the non-PAD wife, who initially presented herself as a persistent "nag." She was told that she was permitted *not* to function as a hovering nurse, and the therapist took the responsibility for a possible worsening of her husband's depression if she did this. Her husband went from being furious at her for "nagging" to being furious at the possibility of abandonment, but when she was helped to remain in this new position, he became activated to increase his participation in the family and return to work. His wife learned that she had the right to move herself out of an impossible situation and that this move did not cause a disaster in her family.

Consistent with the idea that stimulation of healthy resources is a primary function of the therapist, the support of the nonafflicted spouse in families with PAD should be a major component of the treatment program. Although structuring of distance and involvement does not provide the total solution, it has distinct value in periods of crisis when there is no hope of movement from a cycle in which mutual distress can only escalate.

RICHARD C. EVANS, M.D.
Tarrytown, N.Y.

Etiology and Differential Diagnosis of the Morbid Jealousies

SIR: In "A New Concept and Finding in Morbid Jealousy" (June 1976 issue), John P. Docherty, M.D., and Jean Ellis, R.N., reported three cases in which a pathologically jealous male had observed his mother engaging in sexual infidelity. The authors suggested that this finding is of major etiologic

significance. However, they did not comment on another factor they also reported, i.e., the presence of alcohol abuse in at least two of the three cases.

Although morbid jealousy apparently can occur in many settings, alcohol abuse is a well-known factor in many cases (1–3). Excessive alcohol consumption impairs higher cognitive function in general (judgment, discrimination, reasoning, etc.), decreases impulse control, increases aggressiveness, and can exacerbate paranoid personality tendencies to delusional proportions (3, 4). Alcohol abuse can also interfere with normal male sexual function, thereby heightening anxiety and undermining sexual identity (5, 6). All of these effects can contribute significantly to the paranoid clinical picture described by Dr. Docherty and Ms. Ellis, and alcohol abuse should not be omitted in discussing the etiology or planning the treatment of such cases.

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C. GIBSON DUNN, M.D.
Richmond, Va.

Dr. Docherty Replies

SIR: We appreciate Dr. Dunn's careful reading of our article. His comment raises the interesting issue of the differential diagnosis of the morbid jealousies, which we examined only briefly in our paper due to space considerations. We indicated, however, that on the basis of our own observations and literature review we recommend dividing the morbid jealousies into three categories: excessive, obsessive-delusional, and ego-dysfunctional.

The term "excessive jealousy" is used to describe those patients who respond with an extreme reaction to situations generally recognized as jealousy provoking. "Obsessive-delusional jealousy" delineates a group of patients with no other manifest disturbance of ego function who are continually preoccupied with the suspicion or belief that their spouses are sexually unfaithful. "Ego-dysfunctional jealousy" describes patients who experience delusions of infidelity in the context of some serious disturbance of ego functioning, such as schizophrenia, toxic states, or dementiform conditions.

Although alcohol consumption did exacerbate the symptoms in our patients—primarily in the form of decreased impulse control—and was considered as part of the overall treatment, it did not seem central to the presence of pathological jealousy in these men. As we mentioned, they all had the obsessive-delusional form of this disorder, and persistent concern with thoughts of their wives' infidelity preceded their excessive use of alcohol. Moreover, these concerns were present whether or not the patients were drinking. Clinically, what is important is that these men were more likely to act on their suspicions if they were drinking. Thus, it would seem that alcohol was more of an amplifying than an etiologic agent for these patients. Indeed, with regard to the somewhat dubious entity called "alcoholic paranoia," Dr. Chafetz states in the text cited by Dr. Dunn that "This category represents another attempt to emphasize the alcoholic complication instead of the larger underlying problem."

There does, however, seem to be a group of patients for whom alcohol can be a more direct determinant of the appearance of pathological jealousy. In one careful study of the relationship between alcoholism and morbid jealousy, Kolle (1) isolated a group of patients who experienced convictions of infidelities by their spouses primarily in association with acute intoxications. We would categorize these patients as suffering from ego-dysfunctional jealousy, toxic subtype. In these patients, jealous attacks seem dependent on the disturbances of higher cognitive functions that Dr. Dunn describes as secondary to intoxication. This condition, however, is probably rather rare. Shepherd (2) found only 1 such case in his review of 81 unselected cases of morbid jealousy.

Finally, even if we accept the fact that conditions such as dementia, schizophrenia, and toxic states produce a disturbance of ego functions that facilitates the appearance of morbid jealousy and delusions of infidelity, we are still left with the question of why that particular content appears. The life histories and psychodynamics revealed in the cases we studied suggested, we feel, a possible answer to this question for at least one form of the disorder.

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JOHN P. DOCHERTY, M.D.
New Haven, Conn.

Is Psychiatry Doing the Job?

SIR: I would like to take issue with the following statement by Bertram S. Brown, M.D., in "The Life of Psychiatry" (May 1976 issue): "My answer to the question of whether psychiatry is up to the task of dealing with serious mental illness and whether it is doing the job has to be yes." To individuals in situations like mine—working directly on a ward for multiple recidivists in a so-called intensive short-term psychiatric institute—the answer cannot be yes. There is too much recidivism and other evidence of unsatisfactory results. Of course, some relapses will occur as patients gradually adjust to the community, but our committee studying the recidivistic patient found that most such patients are no better off after the 4th or 5th or 10th relapse than before they originally came to this or other such hospitals.

The current approach, directed at crisis resolution or used as an expedient, does not even attempt to be definitive for the illness. The hope that the community would serve to re-

habilitate the seriously ill after a brief hospitalization has not generally been realized and perhaps cannot be until we rethink the subject of psychiatric rehabilitation and reconsider how best to prepare our patients for the pressures involved. For patients who are not seriously ill and can learn from a transient breakdown, Dr. Brown's "yes" answer makes sense.

IRVING M. ROSEN, M.D.
Cleveland, Ohio

Dr. Brown Replies

SIR: Dr. Rosen's letter on the need to rethink the subject of psychiatric rehabilitation raises an issue of great concern to me, both as a psychiatrist and as an administrator.

In the amelioration and control of symptoms of mental illness, progress in psychiatry has been dramatic. These advances make it possible for me to believe that psychiatry *is* up to dealing with serious mental illness and that, to a large extent, it is doing the job. On a psychopharmacologic basis, psychiatrists are able to provide much more effective help to people suffering from depression or psychoses than we were 25 years ago. Perhaps when we can solve such problems as compliance and adverse side effects, our progress will extend even further.

Clearly, however, medical treatment of the illness alone is not sufficient. People subject to severe and repetitive mental disorders usually require multiple supportive and rehabilitative services, many of which have traditionally been defined as outside the scope of psychiatry per se. If psychiatric rehabilitation is to be fully effective, a range of services must be continuously available on a long-term basis. To reach the people most in need of help, services must be relevant to their everyday problems in living and must be aggressively promoted. Even under the best of circumstances, relapses can be expected and occasional episodes of intensive treatment will be required. Nonetheless, much can now be done to minimize the negative consequences of the illness or disability for the patient, the family, and the community.

As an administrator looking at nationwide services for persons with chronically disabling mental health problems, I believe it is increasingly clear that in addition to effective psychiatric input and new technologies, future progress will depend in large part on improved administrative and fiscal mechanisms to promote development of comprehensive psychosocial rehabilitation services on a broader scale. The gap between current knowledge and actual practice is immense. Despite many well-documented research and demonstration projects in psychiatric rehabilitation, thousands of people are not currently receiving optimal help.

I am encouraged that these problems are now being looked at carefully—by professionals, by congressional committees, by the National Institute of Mental Health, by consumer groups, by hospital employees, and others. Perhaps in the next few years we will be able to identify and remove some of the administrative and political barriers contributing to the present dilemmas and contradictions in community care. Psychiatrists can and should provide leadership in this process, at the same time recognizing that our profession alone cannot accomplish all that needs to be done, either clinically or administratively.

BERTRAM S. BROWN, M.D.
Rockville, Md.

Death Fantasies as an Escape Mechanism

SIR: "Is Dying Being Worked to Death" by Ronald Jay Cohen, Ph.D. (May 1976 issue) brings up important considerations related to clinical psychotherapy as well as to everyday philosophy. Dr. Cohen is justifiably concerned that outpourings of articles and books on death and dying, described by some as a "bandwagon" phenomenon, are matters of serious interest to many, including neurotic patients.

The papers Dr. Cohen refers to were chiefly written during the past 3–5 years, but Dr. Paul Schilder and I studied this subject as long ago as 1933. At that time, we were interested in the attitude of normal and neurotic individuals concerning the clinical manifestations of the "death instinct." We administered a questionnaire to a large number of staff and students at the Bellevue Psychiatric Hospital, New York University, and elsewhere (1). Our analysis indicated that apparently normal people were preoccupied with thoughts of death and dying when the need arose to escape from various unbearable situations in life; this served as a sort of sublimation mechanism. For example, death thoughts meant final narcissistic perfection, gratified masochistic tendencies, forced affection where it was withheld, etc. Our final epigram covered the conscious and unconscious meaning of death fantasies, to wit: "All libidinous roads lead to death and death thus becomes the perfect symbol of life."

In a subsequent paper (2), we used the same questionnaire method with neurotics and schizophrenics to examine the importance of separation anxiety from love objects in death obsessions and fantasies of these patients. In effect, the findings were the same as those in normal subjects except that a greater degree of unconscious fear of loss of incest-objects was observed among severe neurotics and psychotics.

Agreeing with the existentialist Heidigger, who wrote of "the existence towards death as a continuous human experience," our main conclusion was that consciously and unconsciously human beings strive toward life and not toward death. Clinically, we found little evidence of the *Trieb* toward extinction.

As to the reason for the recent "heightened interest in death-related phenomena" about which Dr. Cohen and others speculate, could it be that today's increased longevity accounts for and stirs up our interest in death? Actually, however, there is no reawakening of preoccupation with death and dying, only a broad exposure among the laity in these days of psychological sophistication and expanded self-awareness.

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WALTER BROMBERG, M.D.
Sacramento, Calif.

Dr. Cohen Replies

SIR: I would like to thank Dr. Bromberg for calling attention to his prior work and contributing his thoughts on my paper. The heightened interest in death-related phenomena

manifest in current books, essays, and specialized professional journals (e.g., *Omega: The Journal of Death and Dying, Archives of the Foundation of Thanatology*) may indeed be related to increased longevity, as Dr. Bromberg suggests. However, "allowing for discussion of ethical and legal issues raised by medical advances," consideration of the many multifaceted explanations for the subject's increased general popularity remains academically intriguing. In an applied context (with reference to the work of Drs. Bromberg and Schilder) I would agree that psychotherapists must remain attuned to the psychodynamic and behavioral consequences that a death-related preoccupation might hold for an individual patient. To underplay the importance of a fellow's existential struggle would surely be a grave error.

RONALD JAY COHEN, PH.D.
New York, N.Y.

Lithium—Depressant or Antidepressant?

SIR: In his letter "Lithium and Depression" (August 1976 issue) Robert O. Friedel, M.D., noted that lithium can exert either a depressant or an antidepressant effect, depending upon its dose. This is one aspect of a phenomenon I have observed frequently over the last few years that has important therapeutic implications. Lithium has a U-shaped dose-response curve, possibly even an undulating one. For many depressed patients, at the lowest dose lithium exerts a depressant effect, at a somewhat higher dose an antidepressant effect, and at an even higher dose a depressant effect again. Unlike Dr. Friedel I have not found that any specific serum lithium level determines points of reversal of effect.

What is even more important is that the phenomenon is characteristic not only of lithium but also of phenothiazine and thioxanthine tranquilizers. I have worked primarily with thiothixene (Navane) but also have used chlorprothixene (Taractan) and chlorpromazine (Thorazine), and I suspect that these observations pertain to all of the tranquilizing medications in these groups. There is a dose in the range of 0.5–5 mg at which thiothixene exerts an antidepressant effect; below and above this dose, it has a depressant effect. Among patients who become depressed only and show no hypomanic or manic episodes, this dose is relatively low. Among those patients who occasionally display hypomanic or manic episodes, the antidepressant dose is somewhat higher and the range of the antidepressant effect is broader. It is my experience that lithium does nothing that these other tranquilizers will not do if used in these relatively small doses.

This effect can be used therapeutically. I have found that between one-half and two-thirds of depressed patients will experience relief from depression within 24 hours, with minimal danger of toxicity or side effects, once the correct dose of tranquilizer is found. If the small dose of tranquilizer is superimposed on a subthreshold dose of an antidepressant agent or an adequate dose before it has had time to take effect, the response will be much more striking.

If my observation is correct, it implies that lithium does not have the specific relation to manic-depressive illness that is commonly attributed to it. It seems to have this relation because it is so toxic that it can be given only in small doses. Phenothiazines and thioxanthines are far less toxic and are therefore given in relatively larger doses that can exert a therapeutic effect on schizophrenic episodes but are too large to display the antidepressant effect that I have mentioned.

Interested readers can find more extended discussions of this technique of treatment in two previous publications (1, 2).

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MORTIMER OSTOW, M.D.
Riverdale, N.Y.

Fatal Aspiration

SIR: There is not sufficient evidence in the case reported by Robert F. Bort, M.D., in "Catatonia, Gastric Hyperacidity, and Fatal Aspiration: A Preventable Syndrome" (April 1976 issue) to support his hypothesis that the aspiration is in some way related to the patient's underlying schizophrenic process and esophageal dysfunction. We are not told anything about the patient's physical or neurological status, how he was fed, his eating habits (did he "wolf down" his food or chew it?), and his overall pharmacological and other treatment (was he restrained?). These are all factors that might have been involved in the patient's episode of aspiration.

I do not believe that aspiration is necessarily part of a subtle neurophysiological dysfunction in schizophrenia. This may be true for some patients, but others may aspirate on the basis of drug-induced mechanisms. Plachta (1) has reviewed the evidence that atropine-like drugs may lead to loss of control of esophageal sphincters as well as depressing respiratory ciliary activity. I have hypothesized (2) that phenothiazines may cause a bulbar palsy-like syndrome (with possible aspiration) similar to that described by Malitz and associates (3).

It is obvious that further work is necessary to elucidate the causes of fatal aspiration in drug-treated schizophrenics as well as the so-called café coronary and seizures. My own hunch is that there are many causes and, unfortunately, the state of the art and science of treating schizophrenia will not prevent any of them.

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KENNETH SOLOMON, M.D.
Albany, N.Y.

Dr. Bort Replies

SIR: Although I would not deny that phenothiazines may play some as yet unspecified role in aspiration deaths in schizophrenic patients, there are adequate studies indicating

that approximately 50% of *untreated* schizophrenic patients have cineradiographic abnormalities of esophageal function (cricopharyngeal dysfunction and pooling of contrast material within the valleculae and pyriform sinus region). Administration of chlorpromazine had no effect on these abnormalities (1, 2). The effect of phenothiazine drugs on the respiratory ciliary activity is certainly better established, although of unknown clinical importance.

However, I think that Dr. Solomon may have overlooked the major point that I wished to make: regardless of etiology, it is not the aspiration that kills these patients, be they acutely ill schizophrenics or women in labor, but the pH of the gastric aspirate (3). Thus, I offered the recommendation for antacid medication as a preventive measure.

Concerning the specific questions raised about the patient I reported on, I offer the following information. Physical and neurological status remained within normal limits up to the agonal event except as noted in the case report. A mechanically soft diet was prescribed and hand feeding was frequently required. There was no known feeding four or five hours prior to death. The patient was not secluded or restrained during the week before his death; he preferred to lie on a mattress placed on the floor of a large room.

I would like to emphasize that this patient was not asphyxiated by a bolus of food as in the "café coronary syndrome."

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ROBERT F. BORT, M.D.
Ann Arbor, Mich.

Polarization or Specialization?

SIR: The terms "biological" psychiatrists as opposed to "dynamically oriented" or "analytically oriented" have been appearing regularly in the *Journal*. Dr. Bertram Brown's recent overview article (April 1976 issue) and Dr. Joel Kotin's letter (July 1976 issue) use these polarities.

Capable and flexible clinicians I know simply do not fit such typologies; such clinicians are comfortable with various theories of illness and the spectra of therapies. As the world grows more crowded and tense, polarization in many areas increases. Political, economic, and social extremes come into greater focus; it is perhaps in that context that psychiatry may be seduced into dividing itself up where insufficient basis for division exists in reality.

AVRUM EDWARD PASTOR, M.D.
Burlingame, Calif.

More Violent Capgras

SIR: I would like to describe my experience treating a case of Capgras syndrome in a 27-year-old married man with three children. The primary diagnosis in this patient is schizophreniform psychosis with paranoid features. He is convinced that his parents and children are strangers who are being paid by an unnamed foreign power and are trying to spy on him. His conversations with me of late have shown an increased desire to become violent toward these supposed impostors. He has made several elaborate plans to torture his parents and children in order to find out the "truth." Robert Weinstock, M.D., previously reported a case of Capgras syndrome that actually led to violence (letter to the editor, July 1976 issue).

Treatment with fluphenazine decanoate and oral fluphenazine in combination have lessened my patient's previously strong impulses to harm his parents and children, although he still thinks about it occasionally. However, the delusion about the identity of his family still remains.

D.L. CRANE, M.D.
New York, N.Y.

Virilizing Influences, Sexual Behavior, and IQ

SIR: Jerome D. Goodman, M.D., has collected very interesting data which he presents to good effect in "The Behavior of Hypersexual Delinquent Girls" (June 1976 issue) to support the hypothesis that there are important biological determinants of behavior.

There are two points, however, with which I take issue. The first of these, tangential to Dr. Goodman's work, is the unfortunate and perhaps unintended implication that contraceptive availability contributes to "problem sexual behavior." In fact, there is evidence suggesting that a pattern of regular sexual intercourse is usually established *before* a teenager takes action to obtain contraception (1, 2). It appears that many young women in today's culture are prepared to risk pregnancy rather than abstain from coitus.

The second point relates to the hypothesized above-average intelligence of girls exposed to virilizing influences during or before childhood. It would be interesting to know the IQs and socioeconomic status of the parents of the girls in Dr. Goodman's sample; it is possible that their intelligence could be explained by these factors alone. For example, after publication of the Ehrhardt and Money (3) study cited by Dr. Goodman, it was discovered that, although daughters born to progestin-treated mothers had higher IQs than did control subjects, their IQs were *not* elevated in comparison to their own sisters who had not been androgenized in utero.

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VIRGINIA ABERNETHY, PH.D.
Nashville, Tenn.

Dr. Goodman Replies

SIR: In reply to Dr. Abernethy's comments, I am aware that contraceptive measures do not necessarily engender problem sexual behavior in a direct causal relationship. On the other hand, availability of contraceptive devices, information, and supportive understanding of early sexual experi-

ence can be thought of as tantamount to subtle sanction—as though "praising with faint damns."

It is my contention that "problem sexual behavior" refers to the problem of parents who are often at a loss to comprehend the increasingly early arrival of sexual attitudes and experiences of their children. Thus early sexuality may be a product of biological change, and such change may be more relative to earlier menarche and—as is my thesis—biological priming. It has been my experience that parents were relieved to learn that the sexual drivenness of their daughters was possibly related to biology rather than the cliché of sexual acting-out of unconscious factors.

Dr. Abernethy's point regarding the relationship of above-average intelligence and exposure to virilizing influences illustrates the need for further study in this area. Intelligence is the summation of multifactorial input, and it could as easily be stated that the sisters of daughters born to progestin-treated mothers grew up in enhanced environments, with the primary progestin-enhanced sibling serving as additional input. It may be very difficult to reach endpoints of determination in this area, because it remains unsettled as to whether intelligence can ever be conceived of as an absolute or relative capacity. In the small number of cases that I described, I have no data about the IQ of parents, but my impression of their socioeconomic status was that the assembled cases were representative of the general population.

I am convinced that there are other girls who have been primed with virilizing agents whose sexual behavior represents only part of a cluster of symptoms. It remains for practitioners to keep the possibility in mind, ask for the relevant history, and assemble data. Then the matter of whether enhanced intelligence as a result of virilizing agents is a valid concept can be approached through matched studies using control samples.

JEROME D. GOODMAN, M.D.
Saddle River, N.J.

Natural Selection and Neurosis

SIR: In his thoughtful attempt at explaining the relationship between the high prevalence of neurosis and Darwinian theory in "The Role of Neurosis in Phylogenetic Adaptation, with Particular Reference to Early Man," Leon Sloman, M.R.C.S., L.R.C.P., erred in certain important ways.

First, the term "neurosis" is used incorrectly. To gloss over the distinction between neurosis and psychosis is a repudiation of our efforts to understand the origins and manifestations of psychopathological syndromes. We are beginning to discover differences in how psychiatric illnesses are genetically transmitted, and this information is certainly relevant to a paper on evolution. If Dr. Sloman does not feel this is the case, he should have offered more reason for excluding this vital area. Furthermore, Dr. Sloman purposely omits from his definition of neurosis "the adaptive reactions of personality to anxiety and depression." I believe this omission is untenable. The cognitive, emotional, and behavioral reactions to painful affect, whether such reactions seem adaptive or not, form an essential component of neurosis.

Second, in applying the concept of natural selection to the human condition, there is always the danger that the observer will defend what seems to him to be successful and condemn as less fit that which he happens to dislike. According to Dr. Sloman, neurosis was more likely to occur in persons with poorer genetic endowment than the group at large. These unfortunate prehistoric neurotics presumably felt inferior and became anxious and depressed because they really were inferior. Eventually, in his view, their less adequate genetic contribution to the species was lost, and the genetic complement of the species was benefited. The position that is implicitly defended by this incorrect application of evolutionary biology is that one who is emotionally healthy is likely to be genetically superior to his depressed or anxious neighbor.

Third, the fact that we possess a potential to be neurotic does not mean that our becoming so is determined, to any degree, by our genes. Neither does it follow that because we suffer from neurosis, neurosis fulfills a purpose, even the grand purpose of enhancing phylogenetic adaptation.

Our genetic endowment is a broad avenue, not a side street. It allows for much choice and freedom. I believe it is cynical in the absence of scientific evidence to speculate that we are determined more than the facts suggest.

DOUGLAS H. INGRAM, M.D.
New York, N.Y.

Dr. Sloman Replies

SIR: My operational definition of neurosis was restricted for heuristic purposes. I prefer to use the term "neurosis" because the other theories I refer to use it and appear to have addressed themselves to the same phenomenon I have. Introduction of another term would have confounded the issue.

I agree with Dr. Ingram about the importance of differentiating the genetic mechanisms of neurosis and psychosis. I refrained from doing so, initially, only to avoid a dilution of focus. I believe that there is convincing evidence of a direct genetic transmission of psychosis (1), and that the predisposition to neurosis is present in all of us but the emergence of neurosis is the result of an interactional process. There is no evidence of any specific gene or group of genes directly contributing to susceptibility to neurosis.

Dr. Ingram's basic objection seems to be his perception of an implied link between neurosis and genetic inferiority. I emphasized that my hypothesis applies to prehistoric man. In our society, the "Peter principle," which states that one rises to one's highest point of inadequacy, makes it harder to relax and enjoy one's successes (2). For this reason and because of technological and medical progress, Darwinian natural selection can be said to no longer apply in our society (3).

Although my hypothesis does not apply to contemporary society, it is possible that those who are at a genetic disadvantage may, in certain circumstances, be more prone to neurosis than those who are better endowed. For example, Shields (4) has demonstrated that the less intelligent member of a binovular twin pair is also more neurotic. The presence of neurosis in one member of the twin pair may be secondary to his or her intellectual disadvantage or, conversely, the neurosis may be primary and the poor intellectual performance secondary. These possibilities are not mutually exclusive and both would be in accord with my concept of the neurotic maladaptive vicious cycle.

Dr. Ingram focuses on possible negative implications of what I have said, but I prefer to take a more positive view. For example, when a psychotherapist helps to eliminate a maladaptive vicious cycle in a patient, he or she may succeed in preventing more severe pathology, and a minimal intervention may therefore have a major impact.

In the final paragraph of my paper, I referred to the positive aspect of healthy adaptation. My focus on the maladaptive components was based on the need to be selective. Instead of elaborating on how the phylogenetic maladaptation of the individual leads to his or her ontogenetic maladaptation, one could have emphasized the positive aspect of adaptation by focusing on the mechanisms whereby phylogenetic adaptation promotes ontogenetic adaptation. I believe that there is ample evidence for this adaptive circle, which is precisely the converse of the maladaptive vicious cycle that I described. This could also be seen as a mechanism that promoted the action of natural selection by aiding the survival of the fittest.

When Dr. Ingram argues that "it is cynical in the absence of scientific evidence to speculate that we are determined more than the facts suggest," he shows a reluctance to apply evolutionary principles to human behavior. I suggest that the apparent absence of scientific evidence results merely from the limitations of space in my article. I have been impressed by the abundance of evidence for this theory emanating from various fields, including ethology, cultural anthropology, social psychology, etc. I agree with Dr. Ingram that our "genetic endowment . . . allows for much choice and freedom," and I believe that the ideas I have presented could enable us to marvel at the creativity of our genetic potential, both in terms of our individual development and our evolution as a species.

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LEON SLOMAN, M.R.C.S., L.R.C.P.
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LETTERS TO THE EDITOR are welcomed and will be published, if found suitable, as space permits. Like other material submitted for publication, they must be typewritten double-spaced. The letter should not exceed 500 words, including references, unless a special arrangement has been made with the Editor, and they will be subject to the usual editing. Receipt of letters will not ordinarily be acknowledged.

BOOK REVIEWS

Explorations in Child Psychiatry, *edited by E. James Anthony. New York, N.Y., Plenum Press, 1975, 493 pp., $25.00.*

This is quite an extraordinary book for the field of child psychiatry, one that I think is certain to become a classic. Its editor and principal author, E. James Anthony, M.D., who is Ittelson Professor of Child Psychiatry at the Washington University School of Medicine in St. Louis, Mo., should be warmly congratulated for his services to the field. In an address delivered to the Society of Professors of Child Psychiatry in 1973, Anthony reviewed the state of the art and science in this field. Although he delivered this address with his usual wit and erudition, he had some very grave warnings for the future of the field, such as the following: "Child psychiatry remains as service-oriented as ever . . . the art has flourished, but the science has stood still. . . . Efforts . . . must be made if this fragile discipline is to be salvaged." He has also pointed out that the lack of a vigorous, independent research tradition renders child psychiatry an anomaly in the medical field and suggests that we may get transplanted into the school of social work if we do not change our priorities.

Explorations in Child Psychiatry is an effort to assist in the needed change of priorities. Anthony contacted many of the best-known child psychiatrist researchers and asked them to write about their research careers—how and why they got into research and how their research development proceeded along both personal/existential and substantive/scientific dimensions. His goal in this endeavor was to make research a live, concrete, and attainable activity for child psychiatrists to identify with and emulate. Thus this book is a many-faceted mixture of historical, biographical, philosophical, technical, clinical, theoretical, and experiential aspects of research, almost all of which is interesting.

To give a sampling of some of the riches of this volume: papers by Louis Sander and Donald Cohen paint broad perspectives of the theory or natural philosophy of child psychiatry; Dennis Cantwell describes an excellent and comprehensive research model using the hyperkinetic syndrome; Stella Chess describes the experiential and family underpinnings of her renowned longitudinal study; and Reginald Lourie, Lauretta Bender, Hilde Bruch, M.W. Laufer, and Justin Call describe their research odysseys. Papers by Leon Cytryn, Ake Mattson, Edward Futterman, Eugene Arnold, and Joseph Fishoff describe a variety of types of clinical research. A number of papers, such as those by Theodore Shapiro and Gaston Blom, reflect the interest in and need for knowledge of other disciplines.

In short, the book offers a rich and varied assortment, a cornucopia of researchers, but that is only half of the value of the book. The other half consists of papers by James Anthony about research. In the first section of the book he contributes three papers written specifically for this book that deal with general perspectives, research as an academic function of child psychiatry, and the child as a research subject. This last, much neglected topic is especially well treated. Later in the book Anthony contributes a fine chapter on the "serious" experiment and methodology in child psychiatry. Finally, he includes two broad and perceptive lectures that touch on many aspects of research in child psychiatry.

WILLIAM M. BOLMAN, M.D.
Honolulu, Hawaii

Black Child Care: How To Bring Up a Healthy Black Child in America, *by James P. Comer, M.D., and Alvin F. Poussaint, M.D. New York, N.Y., Simon and Schuster, 1975, 394 pp., $9.95.*

"I'm black and that's a positive thing": this message is inherent both explicitly and implicitly in *Black Child Care* by Drs. Comer and Poussaint. Using a question-and-answer format, the authors cover the issues of child development and parent-child interaction from the time of conception through young adulthood. Although they provide an informative and easily read discussion of natural developmental issues for all children, the authors direct their attention to those who provide direct care and supervision for black children. They have succeeded admirably in their endeavor.

Historically, black children have been of incidental interest to authors discussing issues of child development. Black parents and caretakers have had to fend for themselves in their attempts to find answers that are particularly relevant to the developmental experience of the black child. Parents have had to rely on their own childhood experiences, many of which occurred at a time when the key issue was one of survival rather than one of developing, to the fullest extent possible, all of the capacities inherent within an individual. As a result many black parents and caretakers have not had the information base with which to help their children fully experience our changing society.

Racism is a reality; yet there are effective ways of dealing with this vicious issue. Black children must be taught to approach racism from a basis of knowledge, skill, and confidence. If children are to effectively confront racism, their most effective allies and teachers must be their parents and primary caretakers. Thus the needs that *Black Child Care* begins to address are quite evident. The volume is supportive of black parents in their past and present roles, but it also cajoles these parents toward active interaction with and advocacy for their children.

The authors cover many aspects of black existence both in the context of society at large and from the particular point of view of the black child. School, peer relationships, punishment, sex, violence and many other topics are approached in a frank and relevant manner. The authors indicate that a black child must know in detail what is going on and that this information, in order not to be overwhelming, must be communicated to the child from the earliest time in a calm and supportive manner. The key message to black parents is to begin this pattern of comunication early and to build on it

throughout the developmental experience of their children.

I reviewed this volume from two points of view—as a child psychiatrist involved in a teaching program and as a black parent of three children. As a psychiatrist, I note that *Black Child Care* is not a traditional psychiatric text, but for those whose training, experience, or work endeavors bring them into contact with black families there is a great deal of practical information not readily available in other places. If for no other reason than to be able to refer parents of black children to literature that will help them in understanding and interacting with their children, mental health professionals should familiarize themselves with this volume. As a black parent, I must simply thank the authors for a valuable contribution to the black developmental experience.

LEONARD E. LAWRENCE, M.D.
San Antonio, Tex.

Sex After Sixty: A Guide for Men and Women for Their Later Years, *by Robert N. Butler, M.D., and Myrna I. Lewis, A.C.S.W. New York, N.Y., Harper & Row, 1976, 159 pp., $6.95.*

> "There is nothing I like better, Cephalus, than conversing with aged men: for I regard them as travellers who have gone a journey which I too may have to go, and of whom I ought to inquire whether the way is smooth and easy, or rugged and difficult. And this is a question I should like to ask of you who have arrived at that time which the poets call the 'threshold of old age.' Is life harder towards the end, or what report do you give of it?"
>
> "I will tell you, Socrates, what my own feeling is. Men of my age flock together; we are birds of a feather, as the old proverb says. At our meetings the tale of my acquaintances commonly is: 'I cannot eat, I cannot drink, the pleasures of youth and love are fled away. There was a good time once, but now it is gone and life no longer is life.' . . . But to me, Socrates, . . . if old age were the cause, I too (being old) and every other old man would have felt as they do. But this is not my experience, nor that of others whom I have known.
>
> "How well I remember the aged poet Sophocles' response to the question 'How does love sit with age, Sophocles: are you still the man you were?' 'Peace,' he replied. 'Most gladly have I escaped that of which you speak; I feel as if I had escaped from a mad and furious master.' " (1)

Obviously, Butler and Lewis do not view love as a mad and furious master but, rather, as an enhancer of life, an enjoyment not to escape from but to participate in until the very end. Obviously too, Butler, a Pulitzer Prize winner and the first director of the newly created National Institute on Aging, and Lewis have written a compassionate and informative "how to" book that should be comforting and encouraging to all of those who do not look at aging as a means of escape from sexual activity. It is a practical guide for the enjoyment of physical sex and pleasurable sensuality to whatever degree and in whatever way one wishes the satisfaction.

There are indeed two phases of the life cycle to which sexuality is denied: the very young, who "shouldn't," and the old, who "ought to know better." The reality is that the aged do know better. However, partners and sanction by society and family are ingredients not too readily obtainable or provided for by our value system. Butler and Lewis' slim and explicit volume provides the sanctions in a warm yet matter-of-fact manner and encourages the finding of a partner in spite of the disparate male to female ratio caused by the fact that women's life expectancy is greater than men's.

The chapters on overcoming common medical and emotional problems with sex, "Learning New Patterns of Love Making," "People Without Partners," and "Dating, Remarriage, and Your Children," are full of helpful hints. A chapter on "Where To Go for Help" is more explicitly directed to the men and women older than 60; indeed, most of the book is written for the layman.

"The Second Language of Love," the culminating chapter, is an eloquent advocation of the ultimate poignancy and joy inherent in sexual activity. This chapter is especially meaningful for me because I view the need for intimacy and touch and not necessarily for coitus as a biological need rooted in infantile experiences: "The sexual expressions of the elderly are numerous and diverse. . . . Much too often their feeble efforts to establish contactual relationship are misinterpreted and rejected, forcing the old to regressed behavior" (2).

It is the intent of Butler and Lewis to encourage the elderly to healthful sexual expression not only for its pleasurable, life-giving aspects but also to avoid regressive neurotic manifestations. They are to be commended for a frank, highly readable, and jargon-eschewing discourse on the joys of sex after the age of 60.

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JACK WEINBERG, M.D.
Chicago, Ill.

A Short Practice of Clinical Psychiatry, *by Russell Barton. Bristol, England, John Wright & Sons (Chicago, Ill., Year Book Medical Publishers, distributor), 1975, 413 pp., $29.95.*

This book, as the title implies, is a short compilation of the seminars, lectures, ward rounds, clinical demonstrations, and consultations that the author has given over a period of 25 years. Barton has used the material in this book to coach candidates for the Diploma in Psychological Medicine in England and the American Board of Psychiatry and Neurology examinations in the United States. He writes clearly, making explicit matters so often left implicit, and he follows the example of some excellent teachers who impressed him greatly, among them Sir Aubrey Lewis, whose clarity of thought and economy of words were a joy.

From the glossary on prevalence, treatment, and prognosis of 9 mental disorders outlined on the inside opening covers to the listing of 39 drugs commonly used in psychiatry in the United Kingdom in 1975 on the back covers, the author deals with his subject matter well and with an economy of words.

Readers of this journal who are thoroughly aware of the excellent psychiatric texts, encyclopedic in size, that are already available in the United States will find that this book is quite different. "For the sake of brevity," the author states, he has "deliberately excluded description of the way in

which mental disorders develop." He has also omitted discussion of many of the rarer illnesses, but he has added a segment recommending books dealing with such information.

There are short, succinct chapters on the various well-known mental disorders, and there is a brief but comprehensive treatment of psychodynamics and psychotherapy that deals with Freudian theory and the "mental mechanisms" plus a special consideration on how to make a psychodynamic formulation that includes examples. Pavlovian psychodynamic theory and behavior therapy are described, and brief sections consider group therapy, family therapy, supportive psychotherapy, and play therapy. As one can see from the topics dealt with, one virtue of this book is that it offers a handy review.

The chapters titled "Mental Deficiency" and "Mental Disorders of the Aged" should be mentioned, particularly the latter, which, although telescoped, is expertly done. Under the heading "Other Common Heartaches of the Elderly," Barton makes several cogent observations, such as,

> Wise people will stay where their roots and friends are. Familiar objects and places become important in late life. It is no kindness to elderly people to buy them a houseful of new furniture and pictures—"the old and tried and true" can be sadly missed.

There are appendices on history taking, patient inquiry forms, British law and psychiatry, and recording and conveying information as well as a rather truncated list of books recommended for further reading. In these days of required continuing education and threats of specialty reexamination, a short, concise volume like this one has a place if only as a review.

F.J.B.

Legal Challenges to Behavior Modification: Trends in Schools, Corrections and Mental Health, *by Reed Martin. Champaign, Ill., Research Press, 1975, 179 pp., $5.95 (paper).*

Our society is becoming increasingly concerned with the rights of individuals in institutions, especially schools, correctional agencies, and mental hospitals. The concern includes the person's right to treatment as well as his or her right to protection from arbitrary or unwarranted curtailment of freedom in the name of education, social rehabilitation, or treatment. The problem is present with any psychological treatment in a mental hospital and any educational effort in a school or correctional institution. However, the issue has been brought into sharp focus by the development of behavior modification because it is a powerful technology for altering behavior in specific and measurable ways.

The author of this slim but excellent book is a doctor of jurisprudence, a member of the bars of Texas and the District of Columbia, and Director of the Project on Law and Behavior in Washington, D.C., a nonprofit public interest group that examines the legal and human issues involved in providing psychological services in public institutions. *Legal Challenges to Behavior Modification* focuses on the trends in the law regarding such issues as due process, equal protection, accountability, and informed consent in regard to behavior modification programs in institutional settings.

Martin presents a sensitive and balanced approach to the difficult issues that arise in the context of societal needs, advances in behavioral sciences, and the rights of the individual. He correctly emphasizes that developments in the law and in the technology of behavioral change are not necessarily in conflict with each other. Indeed, recent changes in the law requiring schools to educate all handicapped and mentally retarded children arose in part because of convincing demonstrations that government agencies were by no means maximizing the functioning of such citizens by the application of currently available principles of behavioral science. Similarly, the emphasis in behavioral psychiatry on specifying goals of therapy that are mutually arrived at by the patient and his or her therapist is in keeping with a legal perspective that requires the contractual arrangement between patient and client or institution to be explicit and accessible to examination.

This book gives special attention to some behavior modification techniques, including aversive procedures, the use of tokens and tiers, "time-out" from a reinforcing environment as a behavior change method, and positive motivation strategies. It also deals with the thorny problem of the distinction between rights and privileges in institutional settings.

Of course this brief treatise does not provide comprehensive expositions or solutions to the many difficult and interrelated problems in this area. However, it does provide a clear and concise identification of the problems and some of the ways the developing law is dealing with them.

A particularly valuable aspect of the book is an annotated table of 20 key cases and judicial decisions that bear on many of these issues. These include *Clonce* v. *Richardson* (1) (depriving inmates of a federal prison of some of their institutional amenities in a behavior modification project), *Donaldson* v. *O'Connor* (2) (failing to provide adequate treatment when it is the justification for commitment), and *Morales* v. *Turman* (3) (extending the right to treatment to juveniles).

This informative and well-written volume will be of special value to those concerned with behavior modification in institutions. It will provide useful insights to all psychiatrists and those in related health professions who are concerned with treatment (behavior change) in any setting as well.

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JOHN PAUL BRADY, M.D.
Philadelphia, Pa.

Moodswing: The Third Revolution in Psychiatry, *by Ronald R. Fieve, M.D. New York, N.Y., William Morrow & Co., 1975, 280 pp., $8.95*

In this book, obviously written for the layman, Dr. Fieve's thesis is,

> We are now undergoing our third and most spectacular revolution in the treatment of emotional states. In particular, we are witnessing for the first time a major chemical breakthrough with the lithium treatment and prevention of manic depression and recurrent depression.

Although many may agree that the first revolution in psychiatry was synonymous with the removal of chains from

madmen and madwomen by Pinel and that the second revolution can be attributed to the Freudian enlightenment, there are those who would argue that Fieve is too eager to define a third revolution on the basis of the "lithium breakthrough." The great success of psychopharmacological agents must be placed alongside the enormous developments related to social psychiatry, involving dehospitalization, community care, public health ideology, preventive intervention, epidemiology, and cross-cultural psychiatry.

At any rate, Fieve is convinced that depression is the most common psychiatric symptom for which people seek help and that its specific treatment in 80% or more of properly diagnosed cases is lithium carbonate. Many interesting cases are cited to support the thesis that "lithium is the first truly prophylactic agent in psychiatry to control, prevent, or stabilize the future lifetime course of a major mental illness."

The author relates mood swings to creativity, citing Abraham Lincoln, Theodore Roosevelt, and Winston Churchill, among many others, as victims of manic-depressive disorders. Many cryptic forms of manic depression are misdiagnosed, he states, because they masquerade as neurosis, schizophrenia, or organic brain syndrome. The United States, according to cited studies comparing us with Great Britain, is overdiagnosing schizophrenia and underdiagnosing depression. Thus many cases that would be amenable to rapid resolution with lithium are being sidetracked into psychotherapy, psychoanalysis, and other noneffective treatments, with consequent great loss of time, money, and healthy years. In particular, many persons who turn to alcohol and drugs are seen as suffering from depression. Fieve points out that often their dependency can be alleviated if their underlying affective swings can be moderated with lithium.

Many political figures of prominence, such as Eagleton and Forrestal, and many other influential people, such as business executives, educators, and artists, are struggling against mood swings. Because these people have power, the question is raised of psychiatric intervention in government and politics to control abnormal behavior or poor judgment based on affective disturbance. The complications and problems in bringing psychiatric input to bear on critical decisions of historic moment are discussed in detail.

Does psychotherapy work? Fieve asks. His answer is that, compared with lithium, in the depressions (bipolar and unipolar particularly), psychotherapy and psychoanalysis are disappointing, costly, time-consuming, and therefore not indicated. He also makes the case that Freud's famous Wolfman was really a manic-depressive and would be treated by lithium today with possibly much better results than Freud achieved after lengthy analysis.

Fieve also describes the operations of the metabolic ward and lithium clinic associated with the Psychiatric Institute of New York, N.Y. The ward has eight beds for intensive metabolic study of special cases, and the clinic is run with minimal psychiatric staff and offers considerable economic and therapeutic advantages over any other method of handling manic-depressive cases.

Finally, Fieve points out that lithium has unexplored possibilities in the long-term reduction of aggressive behavior, certain forms of alcoholism, some phobias, obsessive-compulsive and anxiety states, emotionally unstable behavior disorders of children and adolescents, and recurrent menstrual depression.

To summarize, this book is readable, interesting, informative to the lay reader, and carries little that is new to the sophisticate. It may be somewhat simplistic and overemphatic on the importance of lithium in the total scene. Its deprecation of psychotherapeutic techniques will elicit attack from some quarters. However, it carries a hopeful message to the average citizen and tells him or her that mental illness, like such physical illness as diabetes, may be based on the lack of a specific substance required by the body metabolism. It tells the reader that important progress is being made through psychiatric research and, I expect, leaves him or her with better regard for the potential of our field. In attempting to understand psychiatry and emotional disabilities through this book, the intelligent layman may feel a welcome relief from the subtleties and vagaries about mental diseases that impinge on him or her from many other sources.

MILTON GREENBLATT, M.D.
Sepulveda, Calif.

Bodily Communication, *by Michael Argyle. New York, N.Y., International Universities Press, 1975, 390 pp., $17.50.*

This book will be a most welcome addition to basic texts on nonverbal communication and body motion signal systems. Although there are many books on these subjects, there are probably none that can meet all of the varied needs of undergraduates, graduate students, specialists in the social sciences, and clinicians who require additional concepts and data about deviant systems.

The author is a well-known writer on numerous subjects in the fields of social psychology, including industrial relations and religion. Alone or with others he has written 12 books besides this one. These earlier studies have given him a wide perspective that is reflected in the content of *Bodily Communication* and in his selected bibliographies at the end of each chapter.

Because Argyle is keenly aware of the more recent developments in sociocultural anthropology, proxemics, comparative psychology, ethology, and social psychology in addition to the basic problems in nonverbal communication, speech, and formal linguistics, his book is a gold mine of information about many aspects of human communication. His suggestions regarding education, professional social skills, treating mental patients who have inadequate social skills, and training for intercultural encounters will be challenging to all who are looking for new methods of helping people do a better job of living. His brief comments on music's having several kinds of meaning with relation to visual imagery and movement responses, on the complex messages of drama, and on ritual as a means of expressing religious beliefs provide lively encouragement to all students of human behavior.

The book is divided into four parts: Biological and Cultural Background, The Different Uses of Bodily Communication, The Different Bodily Signals, and Conclusions and Wider Implications. There is an index for authors and for subjects plus 8 pages of photographs and some figure drawings that are helpful.

It is tempting in a field of such vast scope to search out several areas of excellence or deficiency for special comment. For clinicians the chapters "Bodily Communication in Human Society" and "Cultural Differences and Uniformities," which use case studies from Japan and the Arab world, may be particularly appealing. The more technical chapters on the expression of emotion, communicating interpersonal attitudes, sending information about personality, the different bodily signals, facial expression, gaze, gestures

and bodily movements, posture, bodily contact, spatial behavior, clothes and physique, and nonverbal vocalizations are clear expositions that should make both students and teachers happy.

The chapters on the use of nonverbal communication in social ritual and ceremony and nonverbal communication in politics and persuasion are splendid introductions to complex topics beyond language as such. Although they are also beyond the usual concerns of the clinic, hospital, or family or group practices, they are rewarding because they will help us become better observers and interviewers. The use of videotape and film and other devices is also mentioned.

This book can be highly recommended for its sound scholarship, broad vision, and easy reading on many difficult subjects to all students of language and nonverbal communication.

HENRY W. BROSIN, M.D.
Tucson, Ariz.

The Survivor: An Anatomy of Life in the Death Camps, *by Terrence Des Pres. New York, N.Y., Oxford University Press, 1976, 218 pp., $10.00.*

The Survivor stands in the line of books on the holocaust that attempt to understand, impart a meaning to, or take a message from the concentration camp experience. The author makes it clear that he is not directly concerned with the camps but, rather, with survival itself, "the capacity of men and women to live beneath the pressure of protracted crisis, to sustain terrible damage in mind and body and yet be there, sane, alive, still human." Des Pres bases his work on eyewitness accounts, most of which are from the German but some of which are from the Stalinist experience, and also on contributions from novelists, social scientists, and psychoanalysts. The book is written with passion and is well worth reading.

For Des Pres, the survivor is the new hero of our time. He has succeeded the tragic hero who defied death for the sake of his cause. The survivor turns away from death. His contribution to humanness is to live and thus to celebrate the wellsprings of life affirmation that reside in the biological roots of man. The survivor bears witness to what he has endured so that the world cannot ignore its descent into extremity.

For Des Pres, psychoanalytic explanations of concentration camp behavior cannot account for the survivor. He believes that psychoanalysis correctly assumes that "nothing is to be taken at face value," but he maintains that this dictum does not hold under the extreme conditions of the camps. There, behavior could have no meaning but itself; it is not susceptible to any kind of symbolic elaboration. Thus Des Pres particularly takes issue with Bruno Bettelheim's emphasis on the role of regression in camp life; he also denies such accepted conceptualizations as survivor guilt and identification with the aggressor.

Des Pres's point of view in this instance provides a welcome corrective to some attempts to exaggerate the importance of the psychopathological and to ignore the adaptive value of responses to concentration camp pressures. However, he is wrong in denying that psychological defenses played any role in inmate behavior. People in the camps varied widely in their makeups and the degree to which they were vulnerable to camp conditions. Furthermore, the camps themselves varied, from the bestialities of Buchenwald and Auschwitz to conditions in which hardships and oppression were very great but were not insupportable. On the basis of considerable experience in examining concentration camp survivors, I can attest to the ubiquity of feelings of guilt engendered in various ways by immersion in the emotional and physical cauldrons of the camps. Many of these survivors are still burdened by guilt feelings years later. Des Pres's refusal to admit the existence of "neurotic" mechanisms romanticizes the survivors by attributing to them a superhuman status.

The contention of the author that is hardest to accept is that survival in the camps depended primarily on the inmate's self-conscious choice of life at all costs rather than surrender to apathy and death. Furthermore, the choice is not seen as a commitment to live at all costs but, rather, to live with decency, to uphold the banner of civilization as this was manifested in the underlife of the camp beneath the apparent collapse of the larger civilization around it. This thesis deemphasizes the fact that to survive in the camps required actions on both the communal and the individual levels that were often the product of naked and savage self-interest but without which life could not have been sustained. Des Pres acknowledges that such actions took place, but the whole thrust of his book is to minimize their importance and frequency and to emphasize the altruism and solidarity of camp inmates. He does not and possibly cannot face the appalling fact that the most important determinants of survival in the camps were the state of one's health, the ability to make a temporary contribution to the German war effort, and sheer accident—where one happened to be when a selection for extermination was taking place or a guard felt like discharging his weapon at a human target. Certainly survival would have been impossible without efforts in common and a degree of ingenuity, energy, and determination, but in the face of the German resolve to destroy Jewish protoplasm these factors could have only a minor influence.

Whence comes the yearning, expressed not only in this admirable book but elsewhere, to endow victims with exceptional qualities? Perhaps it stems from the human hunger to believe, in spite of everything, that life must have meaning and that suffering cannot be utterly in vain.

PAUL CHODOFF, M.D.
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Giambattista Vico's Science of Humanity, *edited by Giorgio Tagliacozzo and Donald Phillip Verene. Baltimore, Md., Johns Hopkins University Press, 1976, 480 pp., $16.50.*

This volume is a compendium of Giambattista Vico's thoughts on the science of humanity. Prof. Frank Manuel, one of the 29 scholars who contributed essays to this book, states that Vico was a man out of place, rarely understood, a man now resurrected as part of the cultural *risorgimento* in modern Italy. Vico lived from 1668 to 1744. On the threshold of modernity, he had one foot rooted in the classics while the other broke the virgin ground of new ideas with his masterpiece *Scienza Nuova*. Vico is now recognized as a historiographer as renowned as his British contemporary Edward Gibbon. Both men saw in history a panorama of the future. Gibbon might have been writing of Vico when he said of Tacitus that he was "the first of historians who applied the science of philosophy to the study of facts."

It was the editors' intention that this wide-ranging series of essays provide the reader with a sample of the catalytic consequences of Vico's ideas. One is able to hear harmonics of

Vico's seminal ideas in the works of such disparate thinkers as James Joyce, Ludwig Wittgenstein, Jean Piaget, and Immanuel Kant. Vico's *verum-factum* principle posits, in essence, that the certainty of a truth is grounded in the fact that one has made that truth himself. In other words, man can know history because he created it.

The volume consists of five parts. The first section contains six essays inquiring into the development of Vico's philosophy, his discovery and acceptance of the idea that only he who has made things can truly know them. The second section consists of 4 essays on Vico's conception of history and historical knowledge. The third is a 9-essay analysis relating Vico's thought to the historians of philosophy. The fourth is a compilation of 5 essays dealing with the importance of Vico's thought for a humanistic conception of the social sciences, of man, and of society generally. The fifth section of the book consists of 4 essays that examine Vico's ideas on political doctrines.

Vico, founder of the philosophy of history, conceived the whole of history as a form of reality whose laws, conditions, and ultimate aims are a manifestation of mind. To Vico nothing is accidental; everything has significance; there is a fundamental unity of all scientific inquiry.

For modern psychiatry, the following quotation from Vico's *New Science* has a familiar ring:

> There must be in the nature of human institutions a mental language common to all nations which uniformly grasps the substance of things feasible in human social life and expresses it with as many diverse modifications as these same things may have diverse aspects.

HOWARD P. ROME, M.D.
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Preschool IQ: Prenatal and Early Developmental Correlates, *by Sarah H. Broman, Paul L. Nichols, and Wallace A. Kennedy. Hillsdale, N.J., Lawrence Erlbaum Associates (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1975, 316 pp., no price listed.*

Putting men and other objects into space has been considered a major scientific breakthrough of the past quarter century. Among those interested in child development, the Collaborative Perinatal Project, which was nationwide in scope and involved 53,000 mothers and a follow-up of over 26,000 children from birth to the age of 7, was equally dramatic and worthwhile. *Preschool IQ*, basically a monograph, summarizes the history of the project data from the various participating institutions and presents conclusions related specifically to the correlation of IQ and a series of variables.

Although the critical facts of birth are in themselves important, the variables in white children having the highest correlations with IQ are those of maternal education and the socioeconomic index of the family. The mental test scores at 8 months are critical in evaluating IQ in black and white children but more so in the former. IQs were generally higher in intact families in which the mother had a good education and a good intellect. As noted in the conclusion, the major contribution of this particular study "lies in the extensive longitudinal data, primarily medical in content, which have been prospectfully collected on a very large, heterogeneous 'normal' population."

The data will be variably used and should affect not only medical care but public policy. Throughout the early part of this century there was an obvious need for the data that have been accumulated here. It is to be hoped that not only will the appeals of those who felt more data in this area were needed be answered but that the advocates will use what has been collected.

Preschool IQ is an outstanding source book.

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Washington, D.C.

The Mentally Retarded Child and His Family: A Multidisciplinary Handbook, revised ed., *edited by Richard Koch, M.D., and James C. Dobson, Ph.D. New York, N.Y., Brunner/Mazel, 1976, 532 pp., $15.00.*

This revised edition, like the first, which appeared in 1971, is intended to be used as a text for interdisciplinary courses; it is designed, according to the editors, "to be appropriate to any discipline which requires a broad understanding of the needs and problems of the mentally retarded." The first edition was well received, and the fact that the publisher has produced a revised edition after only 5 years suggests that the book is meeting a perceived need in an increasingly competitive market.

Lecturers who are using the first edition, as well as librarians who see it circulate, will want this updated version of *The Mentally Retarded Child and His Family*. However, purchasers should know that this second edition is less successful than the first was in defining the current state of the art. Of the 30 chapters, 2 are new and 5 others have been substantively revised to assimilate the advances of the past 5 years.

The 5 revised chapters are "Nursing Services" by Camille Legeay Cook, "Educational Services" by Jack Share, "Motivational Aspects of Mental Retardation" by Edward Zigler and David Balla, "Psychiatric Aspects of Retardation in Young Children" by Frank Menolascino, and "Utilization of Learning Principles in Retardation" by C.E. Meyers and D.L. MacMillan. The 2 new chapters are "Physical Therapy Services" by Janet Forinash, R.P.T., who concentrates on work with infants (up to age 3) at home, and "Concepts and Theory of Normalization," a hortatory address by William Bronston that was originally delivered at one of the congresses on Down's syndrome.

Some editorial improvements have been made in the remaining 23 articles, and in some instances a paragraph or two has been added. The chapter titled "Genetic Factors in Causation" contains new material on antenatal diagnosis and some new tables of inborn errors, but the 5 items added to the bibliography of this chapter do not include any of the major books in the field that have appeared since 1969.

The failure to update the bibliographies attached to many of the articles appears to me to be a significant defect in a book that calls itself revised, enlarged, and updated. Chapters in a textbook should include as references both the original articles specific to the data cited and the major hardcover literature to which a serious student can refer for more background.

One reason that this book does not quite keep pace with the times lies in the inclusion of several articles based primarily on specific studies that were recent and relatively less well known at the time of the first edition. The authors of these studies have not provided any postscripts. The community organization effort initiated in Los Angeles in the mid 1960s is still described with the optimism of a 2-year history;

Mercer's account of her now well-known labeling study on mental retardation as identified among Anglo, Mexican, and black populations in southern California still quotes (incompletely?) the American Association on Mental Deficiency definition used in its diagnostic manual in 1961 (1). Some of the continuing case reports from a children's hospital are still reported as in the same status and age as they were in 1968. Except for Share's chapter on education, there is scarcely a reference to the new litigation and its impact on the service delivery system for the mentally retarded.

Despite these deficiencies the book contains a great deal of readable material that stands the test of time; the faculty member who puts this book on his or her students' reading list will not lead them far astray.

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ELIZABETH M. BOGGS, PH.D.
Hampton, N.J.

The Annual of Psychoanalysis, Vol. III, *edited by the Chicago Institute for Psychoanalysis. New York, N.Y., International Universities Press, 1975, 436 pp., $17.50.*

The title of this volume might suggest to those not familiar with the series that it is an annual review of the year's significant literature on psychoanalysis, a sort of progress in psychoanalysis, or that it is a product primarily of the staff of the Chicago Institute for Psychoanalysis. It is neither. Its purpose, as stated in the first volume, is "to seek and publish good writings which focus on the theoretical and clinical aspects of psychoanalysis and, beyond that, over the full range of Freud's scientific humanism." It is directed toward psychoanalysts and also toward scientists and scholars in other disciplines, including the intelligent laity. It has been successful in its efforts because it offers articles of excellence that are in the mainstream of current psychoanalytic thought. This has attracted articles from a wide geographical distribution.

Volume III contains a series of essays, many of which have been published elsewhere, on seven aspects of psychoanalysis written by analysts from all over the world. Many are part of Festschriften, such as the papers presented in honor of Richard Sterba on his 75th birthday and those for Heinz Kohut on his 60th; other papers were presented or written for different occasions or reasons. I cannot in this limited space evaluate each article, but I hope that mentioning the authors and their topics will give the reader an idea of what to expect.

In section 1, Theoretical Studies, M. Basch gives an excellently detailed, critical presentation of Freud's "Project"; M. Hyman writes on libido theory; F. Sawyier presents a good down-to-earth discussion of empathy; and H. Thomä and H. Kächele present a thorough but technical study of methodology.

Section 2, Clinical Studies, includes 3 Festschrift articles honoring Richard Sterba, i.e., the late A. Bonnard's "The Parent's Psychic Reality as Part of the Child's Psychic Reality," P. Heimann's "Sacrificial Parapraxis—Failure or Achievement?" and S. Izner's "Dreams and the Latent Negative Transference"; H. Krystal's "Affect Tolerance"; P-n. Pao's "On the Diagnostic Term, 'Schizophrenia' "; and D. Terman's "Aggression and Narcissistic Rage: A Clinical Elaboration."

In section 3, Psychoanalytic Education, the late H. van der Sterren and H. Seidenberg present another article honoring Richard Sterba titled "The Problem of the Training Analysis."

Section 4, Psychoanalytic History, includes J. Beigler's discussion of Freud's treatment of the Rat Man; G. Pollock's very interesting "On Freud's Psychotherapy of Bruno Walter"; and E. Wolf and J. Gedo's equally interesting article on Montaigne.

Section 5, A Tribute, and an article in section 6, Psychoanalysis as Science, present Festschrift papers by J. Gedo and P. Parin honoring H. Kohut. Two of Kohut's papers are also presented in section 6.

Section 7, Applied Psychoanalysis, includes articles by J. Kavka on Oscar Wilde's narcissism; C. Kligerman's "Notes on Benvenuto Cellini," which also was written in Sterba's honor; and G. Pollock's "Mourning and Memorialization Through Music."

The general scientific level of thought and writing of these articles is high. Psychoanalysis has continued to use the essay style of Freud; it does not lend itself easily to abstracts or summaries. However, I think condensing one's ideas helps an author sharpen his or her article, aids in communication with the reader, and is therefore well worth the effort. In this work, only Kavka's article on Oscar Wilde has such an explicit summary.

A second suggestion that might benefit the reader of this series would be an introduction, however brief, to each volume to explain that it is neither an anthology nor a progress report.

Publishing costs are high, but it might be better to omit a chapter than yield to the custom of using fine print for explanations and especially for the verbatim quotes of patients. For example, every reader will be intrigued by Pollock's article on Freud's psychotherapy of Bruno Walter, the great conductor who was a friend of Gustav Mahler, and fascinated by Freud's brief therapy in this instance. However, Walter's own words are printed in paragraphs using such extremely fine print that it puts the reader off. This is an obstacle in other articles as well.

In conclusion, the content of this book is varied, interesting, and instructive, and anyone concerned with this field will read it with much pleasure and illumination.

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An Atlas of Clinical Neurology, 2nd ed., *by John D. Spillane, M.D. New York, N.Y., Oxford University Press, 1975, 432 pp., $27.00.*

Is a picture worth 1,000 words? Ten thousand copies, translation into Japanese and Spanish, and a second edition of this atlas 10 years after the first answer a resounding yes. This volume began with a collection of thousands of photographs of patients accumulated by Dr. Spillane over 25 years. The text is held to a minimum; the patients' pictures are allowed to speak for themselves. The photographs are grouped in various but logical ways: by anatomy—"Head and Neck" and "The Limbs"; by disease—"Movement Disorders" and "Neurosyphilis"; and by function—"Posture and Gait" and "The Patient in Bed." The photography is su-

perb, as is the quality of printing. The legends supply pertinent clinical history, and the succinct text describes the diseases in lucid and urbane style.

Neurology remains a satisfying specialty in which careful observation of the patient is regularly rewarded. This volume is an ideal medium to elaborate on observations made at the bedside for the medical student and resident. Physicians preparing for qualifying examinations and the general physician who needs assistance with infrequently encountered neurological problems will find this a gold mine of information. This second edition deserves as much success as the first.

DAVID D. DALY, M.D., PH.D.
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Mentally Ill Mothers and Their Children, *by Henry Grunebaum, Justin L. Weiss, Bertram J. Cohler, Carol R. Hartman, and David H. Gallant. Chicago, Ill., University of Chicago Press, 1975, 338 pp., $15.50.*

Even though there is an emphasis on the effects of mental illness in mothers on their children, this book goes well beyond the confines of its title and has many of the hallmarks of a classical study of the nature and treatment of disturbed mothering. The topic is sequentially explored by sharing the results of an innovative joint admission of disturbed mothers and their children to an inpatient psychiatric facility. Although this aspect of the study could itself justify the publication of this book, it is only a small sampling of the clinical and theoretical riches offered by the authors.

The interdisciplinary nature of the collaborative efforts of the five authors is at all times synthesized for the reader, whether the topical area is nursing approaches, administrative challenges, psychiatric management, or psychological research boundaries. Indeed, although the book is presented in five separate sections (Planning for Joint Admission; Psychiatric Nursing Perspectives; Children of Mentally Ill Mothers; Character, Mental Illness, and Mothering; and a Conclusion), the repeated consensus on topical areas of interest is quite remarkable and represents the fruits of long-term collaboration, careful attention to clinical realities, and mutual sharing of results with the reader.

The authors' experiences with joint admission of mother and child are clearly documented. Their generally positive results (including follow-up studies of their sample) strongly suggest that their experiences should be replicable in other clinical settings.

Although the sample size was relatively small, the clinical descriptions, courses in the hospital, and post-hospital experiences are clearly and thoroughly documented. For example, the in-depth view provided of the children of mentally ill mothers is masterful and stands in sharp contrast to the usual approach to large samples of children of very disturbed parents, i.e., providing only statistical data without the description of real experiences and their consequences. *Mentally Ill Mothers and Their Children* provides the anamnesis and current clinical data necessary to definitively explore the mother/father/child interrelationships and how they specifically impinge on the quality of parenting that the mentally disturbed mother is able to provide.

The book also contains numerous clinical vignettes that clearly illustrate the key psychiatric and developmental issues discussed. References are up-to-date and clearly related to the narrative in each of the five sections.

I think that this book illustrates clinical research at its very best. Accordingly, I would recommend it highly for all mental health personnel who are concerned with instances of disturbed mothering, its personal and interpersonal manifestations, and attempts to effectively manage it on behalf of both the parents and their children.

FRANK J. MENOLASCINO, M.D.
Omaha, Neb.

Primal Man: The New Consciousness, *by Arthur Janov, Ph.D., and E. Michael Holden, M.D. New York, N.Y., Thomas Y. Crowell Co., 1975, 522 pp., $10.00.*

In his second exposition of "primal theory," psychologist Arthur Janov proffers a series of chapters on the three levels of consciousness, the tripartite brain, the congruence between the "primal formulation" and the "latest in neurologic research," and how application of all these can reverse the destructive evolutionary process that pushes man into aggression and inhumanity. He is abetted in this effort by neurologist E. Michael Holden and, to a lesser extent, by anthropologist Bernard Campbell and psychologist Bernard McInerny.

Because most of the chapters were written to stand by themselves and because each seems to have been directed to a different readership, their haphazard mixing has produced a loose agglomerate that lacks cohesiveness and focus. Each chapter restates what the foregoing chapters have promulgated, with an occasional divergence or addition that hardly justifies the effort required to follow the incredible prolixity of the writing.

It would be unfair, of course, to judge the worth even of pseudoscience on the prose style of its apologists. At the same time, it would be irresponsible of a reviewer to ignore the paralogic that lies within the tortuous and convoluted phrasings of this book. Further, the uncritical reader might fail to appreciate the significance of the qualifications to what would, without such demur, emerge as extravagant claims. Circular reasoning is hardly unique to primal theorists, but few other psychologies have enlarged their circle to include cancer, heart disease, arteriosclerosis, and longevity as primary foci for their therapeutic applications.

Throughout the chapters there is a tendency to argue by analogy and, finally, to accept similarity as identity, to speculate that something *may* be so and then to base subsequent arguments on the assumption that it *is* so. Sometimes there is a shifting back and forth between contradictory speculations as the needs of the moment dictate. At other times the shift is from banal platitudes to overwhelmingly detailed lessons in neurophysiology. In ponderous asides, insight therapies are dismissed as providing only another level of resistance to consciousness of feelings and integration of "primal pain." Equally inadequate, according to the authors, are behaviorism, hypnotherapy, the "body therapy of the Reichians," reality therapy, Jungian therapy—indeed, any form of therapy other than primal therapy. According to Janov, insight therapy deals only with the intellectual-repressive left brain, and hypnotherapy deals only with the feeling-emotive right brain; only primal therapy facilitates integration of both sides.

Any therapy that claims to cure the major physical and mental ills not only of people but of the entire civilization as well is bound to excite broad interest. Psychiatrists are thus likely to be queried by their patients, their acquaintances,

and the media about the theory explicated in this book and the claims derived from it. They might therefore find it worthwhile to familiarize themselves with one or two chapters, even though the book itself might not warrant intensive or serious consideration.

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Medical Nemesis: The Expropriation of Health, *by Ivan Illich. New York, N.Y., Pantheon Books (Random House), 1976, 275 pp., $8.95.*

Medical Nemesis should be taken with a few grains of salt, although I fear this prescription for sodium chloride will be construed by the author as further evidence of the medical mafia's plot to medicalize the world. This is not a dispassionate review; try as I may, I fear I will review the man rather than the book. In the preface of this U.S. edition Mr. Illich slams a project I have been laboring at, the Club of Kos, an organization intended to be an international forum for medical values similar to the Club of Rome. Unfortunately, the sting of dismissal as a witless charlatan is a lasting one.

The burden of *Medical Nemesis* is that technologists, specifically medical technologists, have stolen mankind's birthright of free choice, specifically health, by dehabilitating rituals and taboos far beyond the ken and control of the common man. According to Illich the priest functionaries (doctors and drug men) of the established church (the medical profession) are so intent on maintaining their social-political power through their arcane knowledge that they willfully maim, sicken, debase, and dehumanize the people of the world.

It is not too difficult to speculate on the genesis of this exposé of the "scandalous-medical-influencing-machine." The book comes out of a think tank on a Mexican hillside where the gnostics gather to the guru. The think tank itself comes out of a Mexican monastery that in 1963 encouraged psychoanalysts from Mexico City to analyse its brothers. As a result, some of the brothers, the "talkers," developed a think tank for an assault on the affluent world, while others, the "doers," led by Gregoire Lemercier, used their personal analysis for a deeper dedication to relieving mankind's suffering (1). The latter moved farther up the mountain and founded Emau, a psychoanalytically oriented home for disturbed adolescents.

Illich runs through the familiar list of modern medicine's paradoxical, undeniable failures and implies that he is revealing a new gospel of therapeutic sin and hygienic heresy. Gradually it becomes clear that this is yet another antiestablishment witch-hunt. No one denies medicine's failures, but Illich is the first to conceive of them as the unrelieved work of the devil. The book concludes, "The true miracle of modern medicine is diabolical. It consists not only of making individuals but whole populations survive on inhumanly low levels of personal health."

Incidentally, the book is the work of many people. Even I had a hand in the manuscript during a visit to the think tank: I prevailed in deleting the idea that North American doctors were willfully withholding the *Merck Manual* (2) from distribution to the poor. It turned out that Mr. Illich's book dealer placed an incorrect order with the publisher. The one original contribution to this book is Valentina Borreman's excellent historical analysis of the concept of death.

I recommend *Medical Nemesis* for the same reason I would have recommended *Malleus Maleficarum* to physicians in 1498. It is well to study the power of the growing antiintellectual movement. Here is the quasirational underpinning for the forthcoming counterreformation against science. The new inquisition will appear as the Grand U.S. Health Plan now under construction by power-oriented lawyers, economists, and schemers in and about our government. When their unfulfilled promises come home to roost there must be an explanation why heaven failed to appear on earth; Mr. Illich and associates provide the local inquisitor with the neat and indisputable answer he or she will be looking for—it is the work of the devil. So on to the auto-da-fé.

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RALPH CRAWSHAW, M.D.
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Des Idées de Jackson à un Modèle Organo-Dynamique en Psychiatrie (From Jackson's Ideas to an Organo-Dynamic Model in Psychiatry), *by Henri Ey. Toulouse, France, Edouard Privat, 1975, 301 pp., 51,20 French francs (paper).*

In Germany and France in the 1920s a renaissance of the ideas of J.H. Jackson (1835–1911) (1) took place. In 1928 a German translation of his Croonian lectures appeared, and its translator, Sittig, published his summary of Jackson's concepts in 1931 (2). Henri Ey and J. Rouart published their series of papers in 1936, and in 1938 they presented their monograph and translations of Jackson's works with an introduction by their professor, H. Claude. They might have agreed with Sittig that Jackson was the greatest thinker of neuropathology and that his rigorous and strict rules of research, analysis, and description are still examples of scientific exactitude and discipline.

The center piece of the current book is the 1938 monograph containing the translation of Jackson's paper "Factors of Insanity" (1, vol. II, pp. 411–421; originally published in 1894) and a paper on "Illusions" (1, vol. II, pp. 23–26; originally published in 1881). The notes running parallel in this work provide a commentary and an extension of the original text. Ey then presents a new system of psychiatry applying Jackson's ideas of evolution and dissolution. The system is composed of a ladder with eight steps: neurotic is the top step, then paranoid, oneiroid, dysesthetic, maniaco-melancholic, confusional-catatonic, schizophrenic, and, finally, demented structures. Ey does not offer a geometric scheme; the one Jackson presented (1, vol. II, p. 414) is conspicuously missing. This leaves us without aid in visualizing and/or imagining the ways of dissolution. Is the descent, once begun, an irrevocable one, or is restitution possible? All schemes of this kind have as much arbitrariness as a deduced order necessarily must. The advantages may be those that Jackson saw in the doctrine of evolution, which is "at once a means of scientific classification and a guide to discovery of new facts" (1, vol. II, p. 395).

In the third part of the book, The Organo-Dynamic Model, Ey presents his grand synthesis connecting the many parts of psychiatry as well as connecting psychiatry and neurology. Ey sees all great psychiatrists, in spite of their differences, as

working toward a unique and united psychiatry. He understands Jackson's concept of dissolution as equaling K. Jaspers' concept of process and Freud's description of alloplastic structures. There must be some truth in this sight, but I wonder if its gets us closer to the secrets of our main concern, the nature of mental illness.

Throughout the book Ey insists on dynamics. This is for him a way out of the oppressive determinism that seems to be so irritating for him in "mechanistic" psychology and psychiatry. There is no question that the term "dynamics" is the fata morgana of contemporary psychiatry and that Jackson's diads of evolution and dissolution, positive versus negative symptoms, and structural differences of higher and lower levels imply an exchange of energy ("dynamis").

Ey knows that he is writing an onthology, a philosophy of neurology and, principally, psychiatry. His main aim is to overcome the dualism he attacks so vigorously. He equates eloquently the dynamics of dissolution with the dialectics of positive and negative symptoms, leading us back to Jackson's stand of identity of phenomena observed from two sides, as if in this way the temptations of spiritualism and psychosomatic parallelism have been overcome. Here Ey becomes a vitalist, composing a new eclectical system. Whether we will be able to use it in our daily work remains questionable. In Henri Ey's hands it probably works.

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The Cycles of Sex, *by Warren J. Gadpaille, M.D.; edited by Lucy Freeman. New York, N.Y., Charles Scribner's Sons, 1975, 472 pp., $17.50; $6.95 (paper).*

Dr. Gadpaille has presented an extremely comprehensive and detailed coverage of the developmental aspects of sexuality, practically from implantation to the grave. He says that "sex begins in the womb," i.e., that sexual differentiation begins there, and proceeds to give us a succinct, clear summary of "thousands of research studies by hundreds of scientists over a number of decades."

Dr. Gadpaille goes on to more widely considered periods of sexual development, from the "all-encompassing influences during the first 18 months" to the "countdown to the biological implosion" (puberty). He has incorporated extensive research findings—both recent and of the past—and, on occasion, confuses the two. For example, he states, "Recent research has clearly corroborated the correlation between the quality of maturing and the presence or absence of overt genital sexuality in infants," citing as the reference René A. Spitz's 1949 article "Autoeroticism: Some Empirical Findings and Hypotheses."

In his preface, Dr. Gadpaille tells us that his book is addressed to two audiences: "The broadest consists of parents, teachers, and clergymen. . . . However, I have been primarily a writer for other professionals." One wonders whether the profession he has in mind is psychiatry, and, if so, whether it is necessary to identify Sigmund Freud as "the pioneer Viennese psychoanalyst." The book incorporates some considerably detailed data that would be presumed to be basic and fundamental to the discipline of psychiatry. With this caveat in mind, I found the book to be almost encyclopedic for medical students, mental health workers, clergymen, and others interested in a well-documented compilation of "the facts of life."

The tone of the book is almost invariably upbeat. The style is excellent. The writing is of a high caliber, flowing smoothly over familiar ground from beginning to end. The author credits his editorial collaborator, Lucy Freeman, for making this book pleasantly readable. It certainly is that.

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Bronx, N.Y.

The Gifted Child, *by Cyril Burt. New York, N.Y., Halsted Press (John Wiley & Sons), 1975, 209 pp., $14.75.*

This is a posthumous book of Dr. Cyril Burt, a well-known English educational psychologist. In an article reprinted from the *American Psychologist* in 1972, Dr. Burt indicates some of the evidence for inheritance of intelligence. He interprets his results as showing that the genetic component in intelligence is greater than the environmental component. For one of his contrast groups he uses both his own data and those of other investigators on siblings raised apart. A second important point is Burt's indication of the loss of talent among gifted children when such talent is unrecognized, discouraged, or goes to waste for other reasons. Finally, he shows that the intellectually gifted are also superior in physical health, strength, and psychological adjustment, in contrast to the stereotypical picture of the maladjusted bookworm.

Unfortunately, these points are presented in a format that can be compared to a symposium by a single author. Burt snatches previous articles, arguments, counterarguments, poetry, limericks, surveys, and cases from here, there, and everywhere and pastes them into a collage. His approach is relatively intemperate.

Potential readers who expect to learn about giftedness in children will, for the most part, be disappointed because children are discussed for the first time roughly three-fourths of the way through this book. *The Gifted Child* contains interesting, useful, and humanitarian material. I wish it had been better written.

DANIEL S.P. SCHUBERT, M.D., PH.D.
Cleveland, Ohio

This Month's Reviewers

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HENRY W. BROSIN, M.D., is Professor of Psychiatry, University of Arizona College of Medicine, Tucson, Ariz.

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

The Scientific Study of Marihuana, *by Ernest L. Abel, Ph.D. Chicago, Ill., Nelson-Hall, 1976, 299 pp., $12.50.*

Gilles de la Tourette's Syndrome, Vol. 1: International Registry, *edited by F.S. Abuzzahab, Sr., M.D., Ph.D., and F.O. Anderson, M.D. Minneapolis, Minn., Minnesota Medical Foundation, University of Minnesota, 1976, 220 pp., no price listed.*

The Alcoholism Digest Annual, Vol. 3: 1974–1975. *Rockville, Md., Information Planning Associates, 1976, 442 pp., $35.00.*

Evaluations of Drug Interactions, 2nd ed., *prepared by the American Pharmaceutical Association with the cooperation and assistance of the American Dental Association, the American Podiatry Association, the American Society of Hospital Pharmacists, the Food and Drug Administration, and the National Library of Medicine. Washington, D.C., American Pharmaceutical Association, 1976, 520 pp., $12.50 (paper).*

One of a Kind: The Many Faces and Voices of America, *by Harry Barba. Ballston Spa, N.Y., Harian Press, 1976, 181 pp., $2.95 (paper).*

Cognitive Therapy and the Emotional Disorders, *by Aaron T. Beck, M.D. New York, N.Y., International Universities Press, 1976, 348 pp., no price listed.*

Human Experimentation, *edited by Robert L. Bogomolny. Dallas, Tex., Southern Methodist University Press, 1976, 148 pp., no price listed (paper).*

The Obese Patient. Major Problems in Internal Medicine, Vol. IX, *by George A. Bray, M.D.; series edited by Lloyd H. Smith, Jr., M.D. Philadelphia, Pa., W.B. Saunders Co., 1976, 445 pp., $18.00.*

A Handbook of Cross-National MMPI Research, *by James N. Butcher and Paolo Pancheri. Minneapolis, Minn., University of Minnesota Press, 1976, 451 pp., $20.00.*

Support Systems and Mutual Help: Multidisciplinary Explorations, *edited by Gerald Caplan and Marie Killilea. New York, N.Y., Grune & Stratton (Harcourt Brace Jovanovich), 1976, 315 pp., $19.50.*

Marriage and Divorce: A Social and Economic Study, revised ed., *by Hugh Carter and Paul C. Glick. Cambridge, Mass., Harvard University Press, 1976, 493 pp., no price listed.*

Design and Achievements in Chemotherapy: A Symposium in Honor of George H. Hitchings. *Research Triangle Park, N.C., Burroughs Wellcome Co., 1976, 72 pp., no price listed (paper).*

Know Your Own Personality, *by Hans Eysenck and Glenn Wilson. New York, N.Y., Penguin Books, 1976, 206 pp., $1.95 (paper).*

Getting It: The Psychology of est, *by Dr. Sheridan Fenwick. Philadelphia, Pa., J.B. Lippincott Co., 1976, 191 pp., $7.95.*

The Hierarchical Nature of Personal Illness, *by G.A. Foulds. London, England, Academic Press (Harcourt Brace Jovanovich), 1976, 154 pp., $14.75.*

Hypnosis: Trance as a Coping Mechanism, *by Fred H. Frankel, M.B.Ch.B., D.P.M. New York, N.Y., Plenum Medical Book Co., 1976, 179 pp., $14.95.*

The Psychology of Loneliness, *by Dorothy Meyer Gaev. Chicago, Ill., Adams Press (Philadelphia, Pa., Dorothy M. Gaev, distributor), 1976, 160 pp., $3.95 (paper).*

Models of the Mind: A Psychoanalytic Theory, *by John Gedo and Arnold Goldberg. Chicago, Ill., University of Chicago Press, 1976, 203 pp., $4.45 (paper).*

Traditional Medicine: Implications for Ethnomedicine, Ethnopharmacology, Maternal and Child Health, Mental Health, and Public Health—An Annotated Bibliography of Africa, Latin America, and the Caribbean, *by Ira Harrison and Shiela Cosminsky. New York, N.Y., Garland Publishing Co., 1976, 229 pp., $22.00.*

Learning in Infants and Young Children, *by Michael Howe. Stanford, Calif., Stanford University Press, 1976, 209 pp., $8.95.*

Psychological Types. Bollingen Series XX, *by C.G. Jung; translation by H.G. Baynes revised by R.F.C. Hull. Princeton, N.J., Princeton University Press, 1976, 583 pp., $5.95 (paper).*

Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies, *edited by Arthur Kleinman, Peter Kunstadter, E. Russell Alexander, and James L. Gale. Washington, D.C., U.S. Government Printing Office, 1975, 747 pp., no price listed.*

Children's Rights and the Mental Health Professions, *edited by Gerald P. Koocher, Ph.D. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 246 pp., $17.95.*

Pharmacology: Drugs Affecting Behavior, *by Conan Kornetsky. New York, N.Y., Wiley-Interscience (John Wiley & Sons), 1976, 258 pp., $18.95.*

Encyclopaedic Handbook of Medical Psychology, *edited by Stephen Krauss, M.D., Ph.D., M.Sc. Boston, Mass., Butterworths, 1976, 573 pp., $24.95.*

Hypnosis and Behavior Modification: Imagery Conditioning, *by William S. Kroger, M.D., and William D. Fezler, Ph.D. Philadelphia, Pa., J.B. Lippincott Co., 1976, 416 pp., $21.00.*

International Journal of Psychoanalytic Psychotherapy, Vol. 5, 1976, *edited by Robert Langs, M.D., and the Editorial Board. New York, N.Y., Jason Aronson, 1976, 586 pp., no price listed.*

Neuropsychological Assessment, *by Muriel Deutsch Lezak. New York, N.Y., Oxford University Press, 1976, 514 pp., $16.95.*

Psychic War in Men and Women, *by Helen Block Lewis. New York, N.Y., New York University Press, 1976, 313 pp., $12.00.*

Piagetian Theory and Its Implications for the Helping Professions: Proceedings of the Fourth Interdisciplinary Seminar, *edited by Gerald I. Lubin, James F. Magary, and Marie K. Poulsen. Los Angeles, Calif., University Affiliated Program, Childrens Hospital of Los Angeles, 1975, 341 pp., $7.50 (paper).*

Lovey: A Very Special Child, *by Mary MacCracken. Philadelphia, Pa., J.B. Lippincott Co., 1976, 189 pp., $7.95.*

Battered Wives, *by Del Martin. San Francisco, Calif., Glide Publications, 1976, 269 pp., $6.95 (paper).*

Social Psychiatry, Vol. II: The Range of Normal in Human Behavior, *edited by Jules H. Masserman, M.D. New York, N.Y., Grune & Stratton (Harcourt Brace Jovanovich), 1976, 149 pp., $16.50.*

The Problem-Oriented Psychiatric Index and Treatment Plans, *by Monte J. Meldman, M.D., Gertrude McFarland, R.N., M.S., and Edith Johnson. St. Louis, Mo., C.V. Mosby Co., 1976, 202 pp., no price listed (paper).*

Cerebral Vascular Disease: 7th International Conference, Salzburg, *edited by J.S. Meyer, H. Lechner, and M. Reivich. Acton, Mass., Thieme/Publishing Sciences Group, 1976, 202 pp., $26.00.*

Toward a New Psychology of Women, *by Jean Baker Miller. Boston, Mass., Beacon Press, 1976, 139 pp., $9.95.*

Physiology of Aggression and Implications for Control: An Anthology of Readings, *edited by Kenneth Evan Moyer. New York, N.Y., Raven Press, 1976, 320 pp., $15.00 (paper).*

Persona: Social Role and Personality, *by Helen Harris Perlman. Chicago, Ill., University of Chicago Press, 1976, 242 pp., $4.50.*

Das Pickwick-Syndrom: Schlafanfälle und Periodenatmung bei Adipösen, *by Prof. Dr. Uwe Henrik Peters and Prof. Dr. Hubert Rieger. Munich, Germany, Urban & Schwarzenberg, 1976, 80 pp., no price listed (paper).*

Piagetian Theory and Its Implications for the Helping Professions: Proceedings of the Fifth Interdisciplinary Seminar, *edited by Marie K. Poulsen, James F. Magary, and Gerald I. Lubin. Los Angeles, Calif., University Affiliated Program, Childrens Hospital of Los Angeles, 1976, 406 pp., $8.50 (paper).*

The Trial of the Assassin Guiteau: Psychiatry and Law in the Gilded Age, *by Charles E. Rosenberg. Chicago, Ill., University of Chicago Press, 1976, 283 pp., $4.95 (paper).*

New Directions in Sex Research, *edited by Eli A. Rubenstein, Richard Green, and Edward Brecher. New York, N.Y., Plenum Press, 1976, 170 pp., $19.50.*

Compliance with Therapeutic Regimens, *edited by David L. Sackett and R. Brian Haynes. Baltimore, Md., Johns Hopkins University Press, 1976, 287 pp., $15.00.*

The Psychodynamics of Hostility, *by Leon J. Saul, M.D., with Barbara Wrubel. New York, N.Y., Jason Aronson, 1976, 226 pp., $12.50.*

Explorations of Intrapersonal Space. The Measurement of Intrapersonal Space by Grid Technique, Vol. 1, *edited by Patrick Slater. New York, N.Y., John Wiley & Sons, 1976, 254 pp., $19.95.*

Psychotherapy of Preoedipal Conditions: Schizophrenia and Severe Character Disorders, *by Hyman Spotnitz, M.D., Med.Sc.D. New York, N.Y., Jason Aronson, 1976, 381 pp., $20.00.*

Literary Criticism and Psychology. Yearbook of Comparative Criticism, Vol. III, *edited by Joseph P. Strelka. University Park, Pa., Pennsylvania State University Press, 1976, 298 pp., $13.95.*

Treatment and Justice in Penology and Psychiatry: The Sandoz Lecture 1976, *by Nigel Walker. Edinburgh, Scotland, Edinburgh University Press, 1976, 23 pp., no price listed (paper).*

Professional Approaches with Parents of Handicapped Children, *edited by Elizabeth J. Webster, Ph.D. Springfield, Ill., Charles C Thomas, 1976, 255 pp., no price listed.*

Biofeedback, Behavior Therapy and Hypnosis: Potentiating the Verbal Control of Behavior for Clinicians, *edited by Ian Wickramasekera, Ph.D. Chicago, Ill., Nelson-Hall, 1976, 591 pp., $18.95.*

Group Therapy 1976: An Overview, *edited by Lewis R. Wolberg and Marvin L. Aronson; Arlene R. Wolberg, guest editor. New York, N.Y., Stratton Intercontinental Medical Book Corp., 1976, 243 pp., $17.00 (paper).*

The American Board of Psychiatry and Neurology

The following successfully completed the Board examination given in Minneapolis, Minn., June 21–22, 1976.

PSYCHIATRY

Abdelmalek, Ezzat, M.D., Des Ormeaux, Que., Canada
Ackerly, Robert N. Jr., M.D., Pacific Palisades, Calif.
Ahn, Byung H., M.D., Baltimore, Md.
Alappatt, Jose L., M.D., Independence, Iowa
Alpert, Michael C., M.D., New York, N.Y.
Amin, Mohammed M., M.D., Montreal, Que., Canada
Andrew, Robert J., M.D., Reno, Nev.
Arcuni, Orestes J., M.D., West Redding, Conn.
Autry, Joseph A. III, M.D., Washington, D.C.

Baker, Courtney F., M.D., North Wales, Pa.
Ball, Leonard D. III, M.D., Gulfport, Miss.
Barall, Bertram, M.D., New York, N.Y.
Baucum, Charles W., M.D., Denver, Colo.
Bazelon, Eileen A., M.D., Philadelphia, Pa.
Bendfeldt, Fernando, M.D., Guatemala City, Guatemala
Bendit, Emile A., M.D., Columbia, Md.
Biala, Harvey, M.D., Lemon Cove, Calif.
Bond, Winkler D., M.D., Alabaster, Ala.
Booth, Carole M., M.D., Eliot, Me.
Boria, Teresa M., M.D., Glen Arm, Md.
Brod, Thomas M., M.D., Pacific Palisades, Calif.
Brody, David M., M.D., Briarcliff Manor, N.Y.
Bromen, Kenneth A., M.D., Duluth, Minn.
Brooks, Robert W., M.D., New York, N.Y.
Brotman, Carl J., M.D., Wayland, Mass.
Brown, Murray A., M.D., Sherman Oaks, Calif.
Buchdahl, Alice J., M.D., Pittsburgh, Pa.
Burns, David D., M.D., Philadelphia, Pa.
Butzer, Stephen C., M.D., St. Paul, Minn.

Carlton, Thomas G., M.D., Camp LeJeune, N.C.
Carter, Thomas F., M.D., Woodland Hills, Calif.
Catanzano, Attilio B., M.D., Fayetteville, N.Y.
Cincotta, Patricia, M.D., Hilldale, N.J.
Cladel, Charles E. Jr., M.D., Hummelstown, Pa.
Cokeley, John M., M.D., Topeka, Kans.
Coleman, Peter J., M.D., Baltimore, Md.
Corman, Clifford L., M.D., Golden Valley, Minn.
Curran, Barbara E., M.D., Dedham, Mass.

Damonze, Ramsay, M.D., Willowdale, Ont., Canada
Das, Arabinda, M.D., Belleville, Ill.
Daum, Conrad H., M.D., Martinsville, Va.
Davis, Barney M. Jr., M.D., Galveston, Tex.
Davol, Peter B., M.D., Ann Arbor, Mich.
De Bell, Paul, M.D., New York, N.Y.
DeFrancisco, Don F., M.D., Irvine, Calif.
de la Fuente, Maria E., M.D., Morton Grove, Ill.
Dempsey, Glenn M., M.D., Tenafly, N.J.
Desai, Rajesh B., M.D., Flushing, N.Y.
deZayas, Jose A., M.D., Miami, Fla.
Dickens, Robert A., M.D., Worcester, Mass.
DiFabio, Dominick F., M.D., Brooklyn, N.Y.
Drukteinis, Albert M., M.D., Concord, N.H.

Edison, Neil H., M.D., North Miami, Fla.

Feiger, Alan D., M.D., Lakewood, Colo.
Finkelor, Thomas M., M.D., Los Angeles, Calif.
Fishkin, Ralph E., D.O., Philadelphia, Pa.
Folk, James W. Jr., M.D., Charleston, S.C.
Fuller, Robert E., M.D., Manhasset, N.Y.

Geist, Jack E., M.D., Milwaukee, Wis.
Gelfond, Stephen D., M.D., San Antonio, Tex.
Gendernalik, David R., M.D., Detroit, Mich.
Geske, David L., M.D., Plateville, Wis.
Gfeller, Eduard, M.D., Birmingham, Ala.
Goldwasser, Rhoda B., M.D., Cambridge, Mass.
Golumbeck, Carl T., M.D., Augusta, Ga.
Good, Michael I., M.D., Boston, Mass.
Gordon, Robert P., M.D., Chicago, Ill.
Gordon, Rochelle H., M.D., Orinda, Calif.
Gould, Edward M., M.D., Glen Head, N.Y.
Gregory, Jerry G., M.D., Columbia, S.C.
Guyer, Dan G., M.D., Southfield, Mich.

Haagen, Elaine K., M.D., Bronx, N.Y.
Herron, William S. Jr., M.D., Atlanta, Ga.
Hershfield, Bruce, M.D., Monkton, Md.
Herzog, Alfred, M.D., Glastonbury, Conn.
Hicks, Edward L., M.D., Philadelphia, Pa.
Hildreth, Arthur M., M.D., Towson, Md.
Hoffman, Jeffrey M., M.D., Beverly, Mass.
Hollander, Annette, M.D., Weehawken, N.J.
Hopkin, John T., M.D., Carmichael, Calif.
Horton, Frederick T. Jr., M.D., Nashville, Tenn.
Howard, James D., M.D., Tacoma, Wash.
Howard, Joan L., M.D., Venice, Calif.
Hunter, Rosemary S., M.D., Chapel Hill, N.C.

Iqbal, Mohammad J., M.D., Cliffside Park, N.J.

Jackson, Anthony H., M.D., Newton, Mass.
James, J. Frank, M.D., Fresno, Calif.
Jefferson, James W., M.D., Madison, Wis.
Johnson, Edward J., M.D., Wauwatosa, Wis.
Johnson, Roger M., M.D., Greeley, Colo.
Jones, Jerry T., M.D., Stockton, Calif.

Kane, Jonathan, M.D., Brooklyn, N.Y.
Kenig, Lana P., M.D., Philadelphia, Pa.
Kennedy, James R., M.D., Cort Madera, Calif.
Kinlan, Joan E., M.D., Washington, D.C.
Klamt, Robert R., M.D., Modesto, Calif.
Klein, Fred, M.D., New York, N.Y.
Klein, Gary A., M.D., Baltimore, Md.
Klein, Rona, M.D., Boston, Mass.
Knowles, Frederick E. III, M.D., Baltimore, Md.

Lachover, Leonard W., M.D., Oak Park, Mich.
Lakovics, Magnus, M.D., Virginia Beach, Va.
Langer, Samuel J., M.D., New York, N.Y.
Lazar, Susan G., M.D., Charlottesville, Va.
Lee-Benner, Lord A., M.D., Philadelphia, Pa.
Leibl, Raymond D., M.D., Toronto, Ont., Canada
Lerner, Robert G., M.D., Santa Monica, Calif.
Levine, Stephen B., M.D., Shaker Heights, Ohio
Loffler, Pedro M., M.D., Mamaroneck, N.Y.
Lopez, Virgilio D., M.D., Hammonton, N.J.
Lourie, Cary H., M.D., Los Angeles, Calif.
Lowenbergh, Laura L., M.D., Chapel Hill, N.C.
Lu, Tzu C., M.D., Houston, Tex.
Lund, Stevan R., D.O., Albuquerque, N.M.

McNeely, James D., M.D., Louisville, Ky.
Malcolm, Robert Jr., M.D., Mt. Pleasant, S.C.
Margolis, Gerald H., M.D., Needham, Mass.
Marmer, Stephen S., M.D., Los Angeles, Calif.
Martin, Jerry P., M.D., Los Angeles, Calif.
Minard, John L., M.D., Elkins, W. Va.
Missel, Jerome L., M.D., Weston, Mass.
Mitch, Paul S., M.D., Toledo, Ohio

Nachumi, Gideon, M.D., Hartsdale, N.Y.
Nestor, Hubert R., M.D., Newport Beach, Calif.
Niven, Robert G., M.D., Rochester, Minn.
Norton Y Tarpez, Jay, M.D., Sierra Vista, Ariz.

Obadia, Yvette, M.D., New York, N.Y.
O'Sullivan, James N., M.D., Omaha, Neb.

Padnes, Stephen C., M.D., Glenside, Pa.
Pakola, Richard S., M.D., Norfolk, Va.
Palmer, Richard C., M.D., Rancho Palos Verdes, Calif.
Park, Sanghae, M.D., Tenafly, N.J.
Pepper, Tom H., M.D., FPO, Seattle, Wash.
Perry, David A., M.D., Jamesville, N.Y.
Pilette, Wilfrid L., M.D., Newtonville, Mass.
Posner, Robert B., M.D., Bethesda, Md.
Powers, Thomas R., M.D., San Francisco, Calif.

Qualls, C. Brandon, M.D., Providence, R.I.

Ramos, Flordeliza P., M.D., Bedford Heights, Ohio
Rauscher, Frederick P., M.D., Washington, D.C.
Read, Randolph A., M.D., San Diego, Calif.
Reich, Louis H., M.D., New London, Conn.
Reisen, David, M.D., Newton Center, Mass.
Rigas, Constantine, M.D., Crystal, Minn.
Rivera-Lara, Ruth M., M.D., Philadelphia, Pa.
Rodenberger, Philip D., M.D., Sinking Spring, Pa.
Roff, George J., M.D., Armonk, N.Y.
Roide, Edward J., M.D., Weston, Mass.
Rosen, David H., M.D., San Francisco, Calif.
Rosson, Barry A., M.D., Dallas, Tex.
Rounds, Barbara L. B., M.D., Fair Oaks, Calif.
Rubin, Jeffrey, M.D., New York, N.Y.
Rubinstein, Mark, M.D., Brooklyn, N.Y.

Samios, Nicholas, M.D., Forest Hills, N.Y.
Schakne, Norman R., M.D., Huntington Woods, Mich.
Schindler, Barbara, M.D., Philadelphia, Pa.
Schmidt, Milton J., M.D., West Newton, Mass.
Schuller, Arthur B., M.D., Sacramento, Calif.
Schulte, Henry J. III, M.D., Ann Arbor, Mich.
Schulz, J. Albert, M.D., Lancaster, Pa.
Schutz, David C., M.D., Wheaton, Ill.
Schwartzman, Richard, D.O., Philadelphia, Pa.
Secrest, Leslie H., M.D., Dallas, Tex.
Shah, Navin C., M.D., Central Islip, N.Y.
Shahid, Syed I.H., M.D, Montebelo, Calif.
Shershow, Lee W., M.D, Beverly Hills, Calif.
Sicignano, Joseph R., M.D., Los Angeles, Calif.
Silver, Hilary, M.D., Stockton, Calif.
Silverman, Raymond M., M.D., Highland Park, Ill.
Sinkman, Arthur, M.D., New York, N.Y.
Siris, Samuel G., M.D., Demarest, N.J.
Sitaram, N., M.D., Rockville, Md.
Smith, Hugh S., M.D., Newton Highlands, Mass.
Sohn, Jeung H., M.D., Bow, N.H.
Spiegel, David, M.D., San Francisco, Calif.
Stein, Vilja K., M.D., Falls Church, Va.
Stevenson, James M. II, M.D., Charleston, W. Va.
Storm, James E., M.D., San Francisco, Calif.
Streichenwein, Suzan M., M.D., APO New York, N.Y.
Streltzer, John M., M.D., Honolulu, Hawaii

Taube, Steven L., M.D., Cheshire, Conn.
Taylor, Michael J., M.D., Stockton, Calif.
Teusink, J. Paul, M.D., Topeka, Kan.
Trivus, Robert H., M.D., Bridgeville, Pa.
Trutt, Simon M., M.D., Ridgefield, Conn.

Upthegrove, Daniel D., M.D., Aptos, Calif.
Utsinger, Carl D., M.D., Venice, Calif.

vanBaval, James O., M.D., Longmeadow, Mass.
van der Kolk, Bessel A., M.D., Cambridge, Mass.
Van Doren, Thomas H., M.D., Kalamazoo, Mich.
Vickar, Garry M., M.D., Creve Coeur, Mo.
Volkman, Edward A., M.D., Wynnewood, Pa.

Ward, Harold W. Jr., M.D., La Jolla, Calif.
Waugh, Lyndon D., M.D., Dunwoody, Ga.
Weinstein, Frederic, M.D., Columbia, S.C.
Weiss, Robert S., M.D., Shaker Heights, Ohio
Welsh, Howard K., M.D., New York, N.Y.
Werne, Joellen, M.D., Woodside, Calif.
Wilkinson, George L., M.D., Woodside, Calif.
Willner, William F., M.D., Denver, Colo.
Wilson, George F., M.D., Skillman, N.J.
Wohgelernter, Joseph I., M.D., Downsview, Ont., Canada
Wood, Dennis E., M.D., Orlando, Fla.

Youngerman, Joseph K., M.D., New York, N.Y.

Zorach, Peter, M.D., Northford, Conn.

NEUROLOGY

Alberts, Melvin C., M.D., Pittsburgh, Pa.
Amorosi, Edward D., M.D., West Covina, Calif.
Antel, Jack P., M.D., Newton Center, Mass.

Belaga, Gary A., M.D., Brooklandville, Md.
Biber, Michael P., M.D., Cambridge, Mass.
Blalock, Elizabeth U., M.D., Encino, Calif.
Bonnette, Harris L., M.D., Spartanburg, S.C.
Bracciodieta, William P., M.D., Palm Springs, Calif.

Carroll, Herman G. Jr., M.D., San Antonio, Tex.
Casey, Kenneth L., M.D., Ann Arbor, Mich.

Cook, David G., M.D., Ardmore, Pa.

Dhaliwal, Gurmail S., M.D., Okemos, Mich.

Ehle, Albert L., M.D., Dallas, Tex.
Estanol, Bruno V., M.D., Coyoacan, Mexico

Feibel, John H., M.D., Rochester, N.Y.
Fine, Edward E.J., M.D., West Orange, N.J.
Fiol-Elias, Miguel E., M.D., Minneapolis, Minn.
Frontera, Alfred T., M.D., Kingston, N.Y.

Galbraith, Robert C., M.D., Little Rock, Ark.
Glasberg, Mark R., M.D., Takoma Park, Md.
Goldberg, George D., M.D., Phoenix, Ariz.
Good, Milton B., M.D., Rocky River, Ohio
Goodell, Richard W., M.D., Scottsdale, Ariz.
Green, Phillip M., M.D., Marshfield, Wis.

Haller, Ronald G., M.D., Dallas, Tex.
Hunter, Richard G., M.D., Charlottesville, Va.
Hurtig, Howard I., M.D., Philadelphia, Pa.

Isgreen, William P., M.D., Alpine, N.J.

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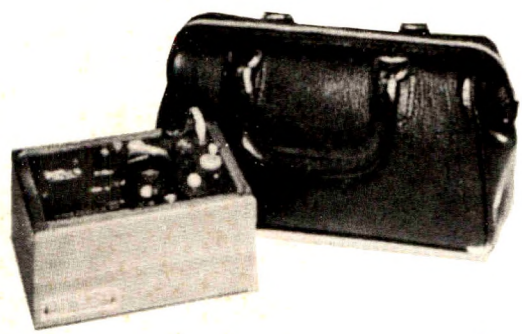
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In this issue

Child Custody Contests in Historical Perspective
By Andre P. Derdeyn

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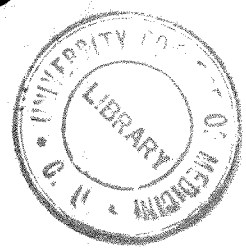
Mankpo: Sceptres or staffs used by the Heviosso (lightning God) cult in medical ceremonies among the Ewe of Tongo and Fon of Dahomey. *Right,* staff with leopard's head, bared teeth and tongue (Ewe, Togo). *Left,* staff with ram's head—the sacred animal of the Heviosso—in the form of a serpent symbolizing the fire-spitting rainbow God of healing (Fon, Dahomey). From the collection of the Segy Gallery, New York City.

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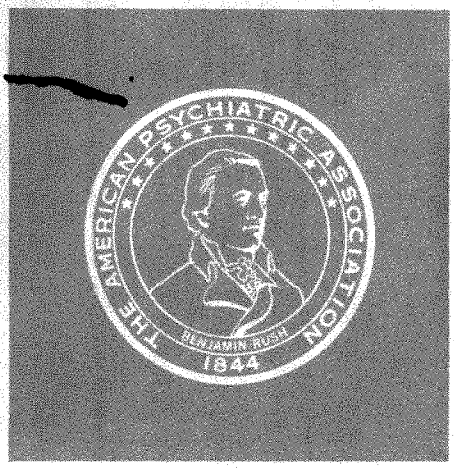
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3. Blackwell B, Marley E, Price J, et al: Hypertensive interactions between monoamine oxidase inhibitors and foodstuffs. Br J Psychiatry 113:349–365, 1967
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A complete set of figures, preferably in the form of glossy prints, should accompany each of the two copies of the paper. Most figures will be reduced to about 3¼ inches in width; all elements of a figure should be prepared to withstand this reduction. Graphs should be finished drawings not requiring further artwork. Authors are urged to engage the services of a professional in the preparation of figures. Authors may be required to meet the costs of any further artwork that must be done in the editorial office.

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After the paper has been scheduled for publication, the edited manuscript will be sent to the first-named author for corrections and answers to queries. Prompt return is necessary to ensure publication in the assigned month. If an author expects to be away from his office for a long period of time after being notified of the acceptance of his paper, he should inform the *Journal* office or arrange with a coauthor to assume responsibility for the paper. Galley proofs will not be sent to authors.

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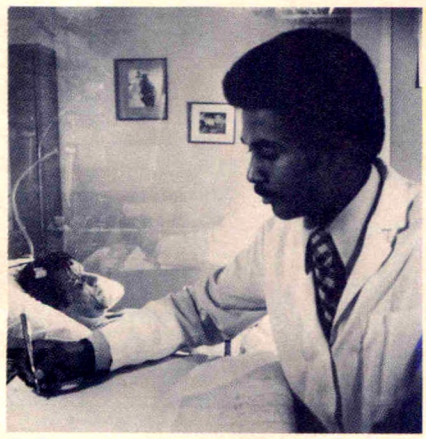
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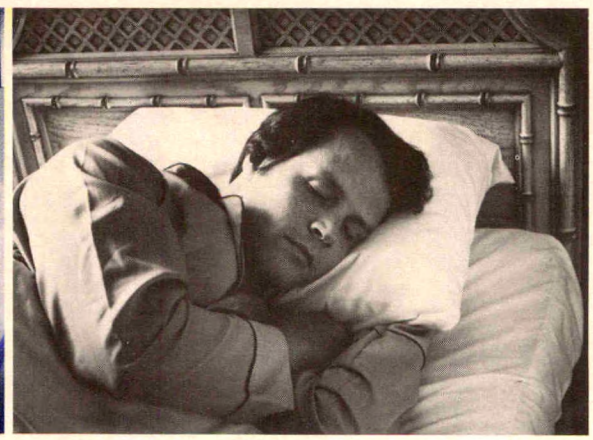
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From the sleep research laboratory:

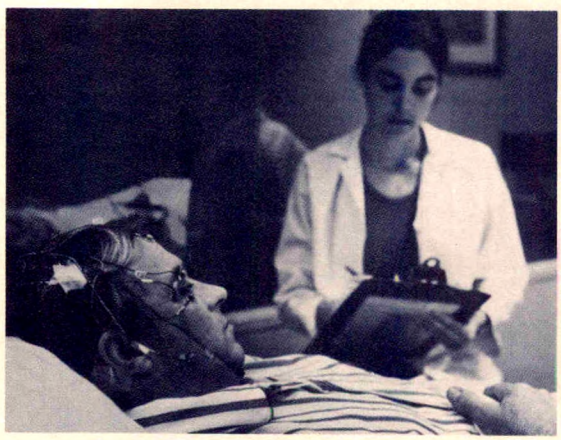
Dalmane® (flurazepam HCl) proved the most effective hypnotic over 14 nights...[1]





14 consecutive nights:
3 in sleep laboratory, 8 at home,
3 in sleep laboratory

...and now, the only one prove effective over 28 nights.[2,3]



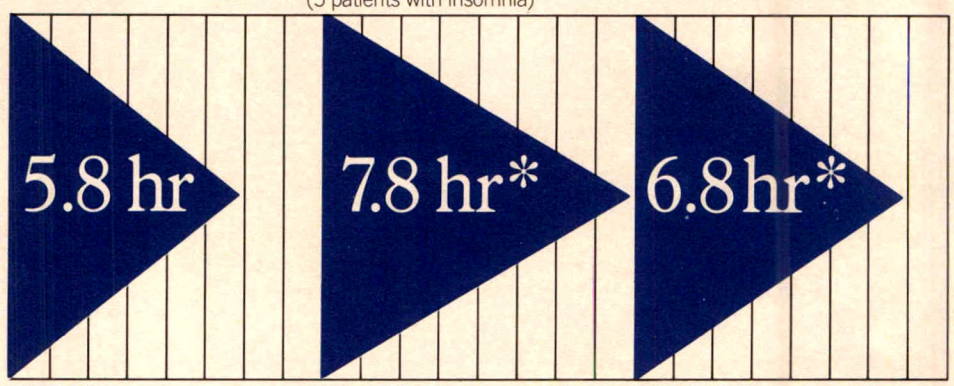


28 consecutive nights:
3 in sleep laboratory, 7 at home,
4 in sleep laboratory, 10 at home,
4 in sleep laboratory[3]

For those patients who need it, Dalmane (flurazepam HCl) alone provides continued effectiveness[2,3]

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But for those patients whose insomnia is a chronic problem, the continued effectiveness of Dalmane is a decided benefit. Even at the end of a 28-night medication period, patients with chronic insomnia were falling asleep faster, spending less time awake during the night, and sleeping substantially longer on Dalmane 30 mg *h.s.* than on baseline placebo nights (average results). This effectiveness was proved[2] and confirmed[3] in two independent sleep research studies using a new 47-night protocol. When similarly evaluated, pentobarbital was ineffective at the end of two weeks.[2]

TOTAL SLEEP TIME (MEAN)[3]
(5 patients with insomnia)



*Significantly increased over baseline placebo ($P<.05$).

In previous studies,[1] chloral hydrate and glutethimide lost most or all effectiveness

In fact, continued effectiveness for both inducing and maintaining sleep over 14 consecutive nights[1] has long been an exclusive benefit of Dalmane. No other available sleep agent, including chloral hydrate or glutethimide,[1] has been able to demonstrate such effectiveness in the sleep research laboratory.

The safety record of Dalmane (flurazepam HCl) is well established

Dalmane is relatively safe and well tolerated. Prolonged administration is not generally necessary, but if used repeatedly, periodic blood counts and liver and kidney function tests should be performed.

Dalmane®
(flurazepam HCl)

ROCHE

relatively safe... no need to increase dosage.

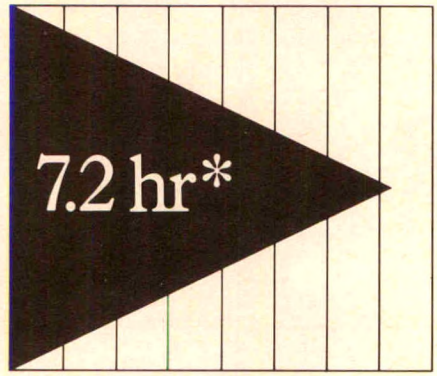
Please see following page for a summary of complete product information.

1,5,7,14,28 nights... as needed, the effectiveness of **Dalmane**® one *h.s.* (flurazepam HCl) Ⓒ IV meets the challenge of insomnia

One 30-mg capsule *h.s.*—usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*—initial dosage for elderly or debilitated patients.

- **Patients fall asleep rapidly, sleep longer on a single *h.s.* dose.**
- **Nighttime awakenings and time spent awake are reduced**
- **Effectiveness maintained without dosage increase from night to night**
- **Patients generally awaken refreshed; morning "hangover" is infrequent**

TOTAL SLEEP TIME (OVERALL MEAN)[3]
(5 patients with insomnia)



DALMANE (flurazepam HCl)
NIGHTS 1-3, 12-14, 26-28
*Significantly increased over baseline placebo ($P < .05$).

REFERENCES:

1. Kales A, *et al*: *Arch Gen Psychiatry* *23*:226-232, Sep 1970
2. Kales A, *et al*: *Clin Pharmacol Ther* *18*:356-363, Sep 1975
3. Dement WC, *et al*: Long-term effectiveness of flurazepam 30 mg *h.s.* on chronic insomniacs. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, Jun 30-Jul 4, 1975

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

Usage in Pregnancy: **Several studies of minor tranquilizers (chlordiazepoxide, diazepam, and meprobamate) suggest increased risk of congenital malformations during the first trimester of pregnancy. Dalmane, a benzodiazepine, has not been studied adequately to determine whether it may be associated with such an increased risk. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, limit initial dosage to 15 mg to preclude oversedation, dizziness and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase.

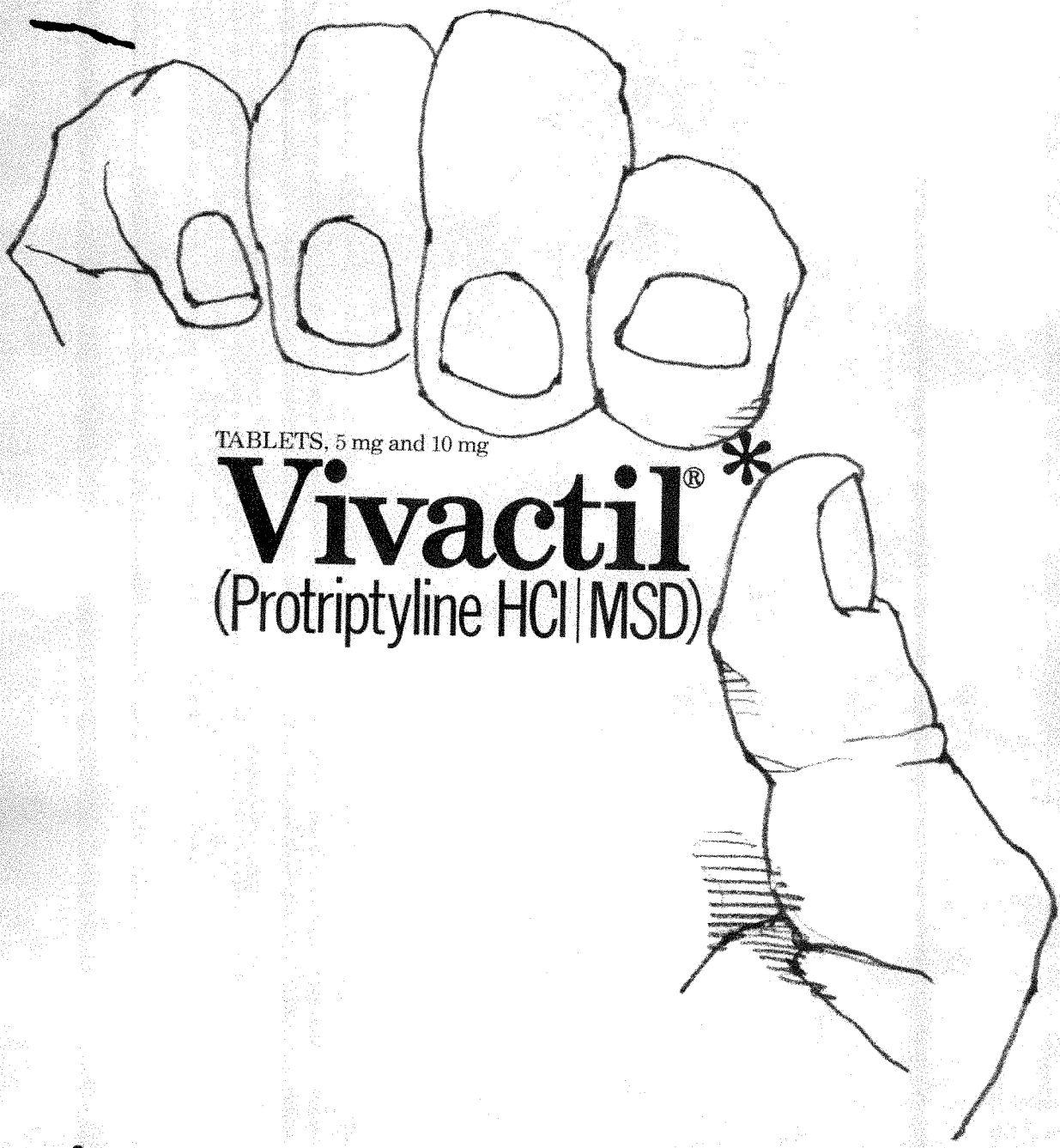
Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE

ROCHE LABORATORIES
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.In clinically significant depression



TABLETS, 5 mg and 10 mg

Vivactil®*

(Protriptyline HCl | MSD)

***When you want an antidepressant that is characteristically nonsedating for the patient under close medical supervision (Symptoms such as anxiety or agitation may be aggravated.)**

MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information please see following page.

In clinically significant depression

TABLETS, 5 mg and 10 mg

Vivactil®

(Protriptyline HCl | MSD)

Contraindications: Known hypersensitivity; acute recovery phase following myocardial infarction. Should not be given concomitantly with an MAOI; hyperpyretic crises, severe convulsions, and deaths have occurred in patients receiving tricyclic antidepressant and MAOI drugs simultaneously. When it is desired to substitute protriptyline HCl for an MAOI, a minimum of 14 days should be allowed to elapse after the latter is discontinued. Protriptyline HCl should then be initiated cautiously with gradual increase in dosage until optimum response is achieved.

Warnings: May block the antihypertensive effect of guanethidine or similarly acting compounds. May impair mental and/or physical abilities required for the performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Should be used with caution in patients with a history of seizures and, because of its autonomic activity, in patients with a tendency to urinary retention or increased intraocular tension.

Tachycardia and postural hypotension may occur more frequently than with other antidepressant drugs. Should be used with caution in elderly patients and patients with cardiovascular disorders; such patients should be observed closely because of the tendency of the drug to produce tachycardia, hypotension, arrhythmias, and prolongation of the conduction time. Myocardial infarction and stroke have occurred with drugs of this class. On rare occasions, hyperthyroid patients or those receiving thyroid medication may develop arrhythmias when this drug is given.

Usage in Children: Not recommended for use in children because safety and effectiveness in the pediatric age group have not been established.

Usage in Pregnancy: Safe use in pregnancy and lactation has not been established; therefore, use in pregnant women, nursing mothers, or women who may become pregnant requires that possible benefits be weighed against possible hazards to mother and child.

Precautions: When protriptyline HCl is used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; likewise, in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase; paranoid delusions, with or without associated hostility, may be exaggerated. In any of these circumstances, it may be advisable to reduce the dose of protriptyline HCl or to use a major tranquilizing drug concurrently. Symptoms, such as anxiety or agitation, may be aggravated in overactive or agitated patients.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. May enhance response to alcohol and effects of barbiturates and other CNS depressants. Possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have access to large quantities of the drug. Concurrent administration with electroshock therapy may increase hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue drug several days before elective surgery, if possible. Both elevation and lowering of blood sugar levels have been reported.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions which have not been reported with this specific drug. However, the pharmacologic similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when protriptyline HCl is administered. Protriptyline HCl is more likely to aggravate agitation and anxiety and produce cardiovascular reactions such as tachycardia and hypotension.

Cardiovascular: hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: confusional states (especially in the elderly) with hallucinations, disorientation, delusions, anxiety, restlessness, agitation; insomnia, panic, and nightmares; hypomania; exacerbation of psychosis.

Neurological: numbness, tingling, and paresthesias of extremities; incoordination, ataxia, tremors, peripheral neuropathy; extrapyramidal symptoms; seizures; alteration in EEG patterns, tinnitus.

Anticholinergic: dry mouth and rarely associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilatation of the urinary tract.

Allergic: skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight), edema (general, or of face and tongue), drug fever.

Hematologic: bone marrow depression; agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia.

Gastrointestinal: nausea and vomiting, anorexia, epigastric distress, diarrhea, peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency, nocturia; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache, and malaise.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of other tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets, containing 5 mg and 10 mg protriptyline HCl each, in single-unit packages of 100 and bottles of 100 and 1000.

For more detailed information, consult your MSD representative or see full prescribing information.

Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

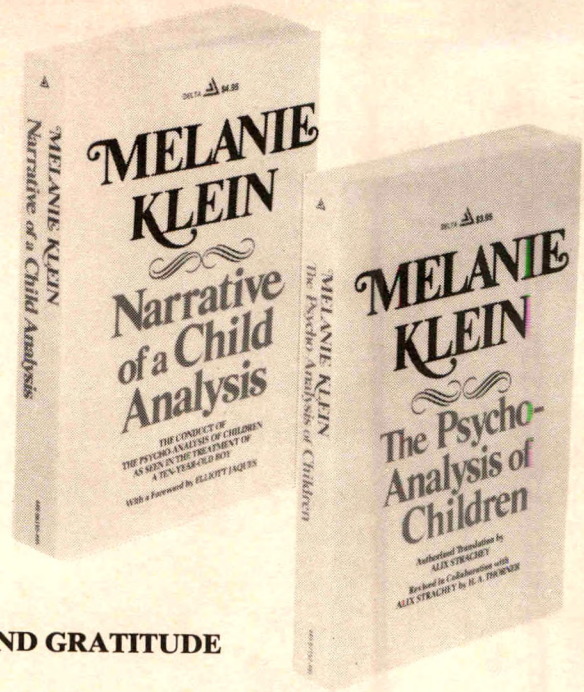
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  By Ruth Moulton
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If you think adjunctive antianxiety therapy is indicated...

Consider Serax® (oxazepam). It has been proved useful when anxiety and tension aren't responsive to simple reassurance and counsel.

Serax has been found valuable, particularly in the older patient, in the management and control of clinically significant anxiety, tension, agitation and irritability. It may also be useful where anxiety accompanies an underlying organic disorder.

Of special importance to elderly patients, Serax may be taken generally without fear of serious side effects.* Its dosage flexibility† generally permits adjustment to individual patient needs, making Serax a convenient adjunct to your therapy in the older patient.

Special care must, of course, be taken in prescribing antianxiety agents for elderly patients, especially where cardiac complications might ensue from a drop in blood pressure. And careful attention must be paid to dosage recommendations and follow-up observation.

See following important information.
See package circular for full prescribing information.

In Brief:

Indications: Oxazepam is indicated for the management and control of anxiety, tension, agitation, irritability and related symptoms. Such symptoms are commonly seen in patients with a diagnosis of psychoneurotic reaction, psychophysiological reaction, personality disorder, or in patients with underlying organic disease. Anxiety associated with depression is also responsive to oxazepam therapy. This product has been found particularly useful in the management of anxiety, tension, agitation and irritability in older patients. Alcoholics with acute tremulousness, inebriation or with anxiety associated with alcohol withdrawal are responsive to therapy.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Warning: Use in Pregnancy:

An increased risk of congenital malformations associated with the use of minor tranquilizers (chlordiazepoxide, diazepam, and meprobamate) during the first trimester of pregnancy has been suggested in several studies. Serax, a benzodiazepine derivative, has not been studied adequately to determine whether it, too, may be associated with an increased risk of fetal abnormality. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. The possibility that a woman of childbearing potential may be pregnant at the time of institution of therapy should be considered. Patients should be advised that if they become pregnant during therapy or intend to become pregnant they should communicate with their physician about the desirability of discontinuing the drug.

Precautions: Hypotensive reactions are rare, but use with caution where cardiac complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to self-overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Adverse Reactions: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam; tablets of 15 mg. oxazepam.

In clinically significant anxiety

Serax®
(oxazepam)

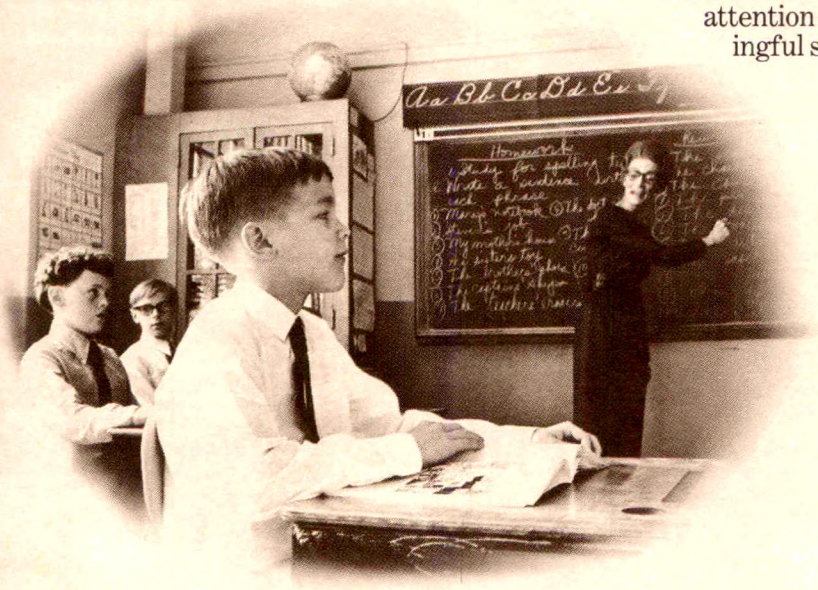


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1962

"...a considerable decrease of hyperactivity...."[1]
Knobel, 1962



Over a decade of controlled studies and clinical experience has shown the effectiveness of Ritalin in reducing the hyperactivity,[1-3] distractibility,[1,4,5] and disorganized behavior[1-8] in the MBD child.

By lessening the effects of motor and attentional disorders, Ritalin can help the MBD child to better focus his attention on meaningful stimuli and thus can often improve cognition and promote learning.[6,9]

And side effects – insomnia a appetite loss – with Ritalin have occurred less frequently than with dextroamphetamine.[10,11]

Indeed, Ritalin is currently a drug of choice in many MBD situations,[10,12] and can prove to be an important element in many complete remedial programs for MBD.

Therapy with Ritalin should b undertaken only after a medical diagnosis of MBD has been made. Drug treatment is not indicated fo all children with MBD.

Dosage should be periodically interrupted. Often, these interruptions reveal some "stabilization" in the child's behavior even without medication, permitting a reduction in dosage and eventual discontinuance of drug therapy.

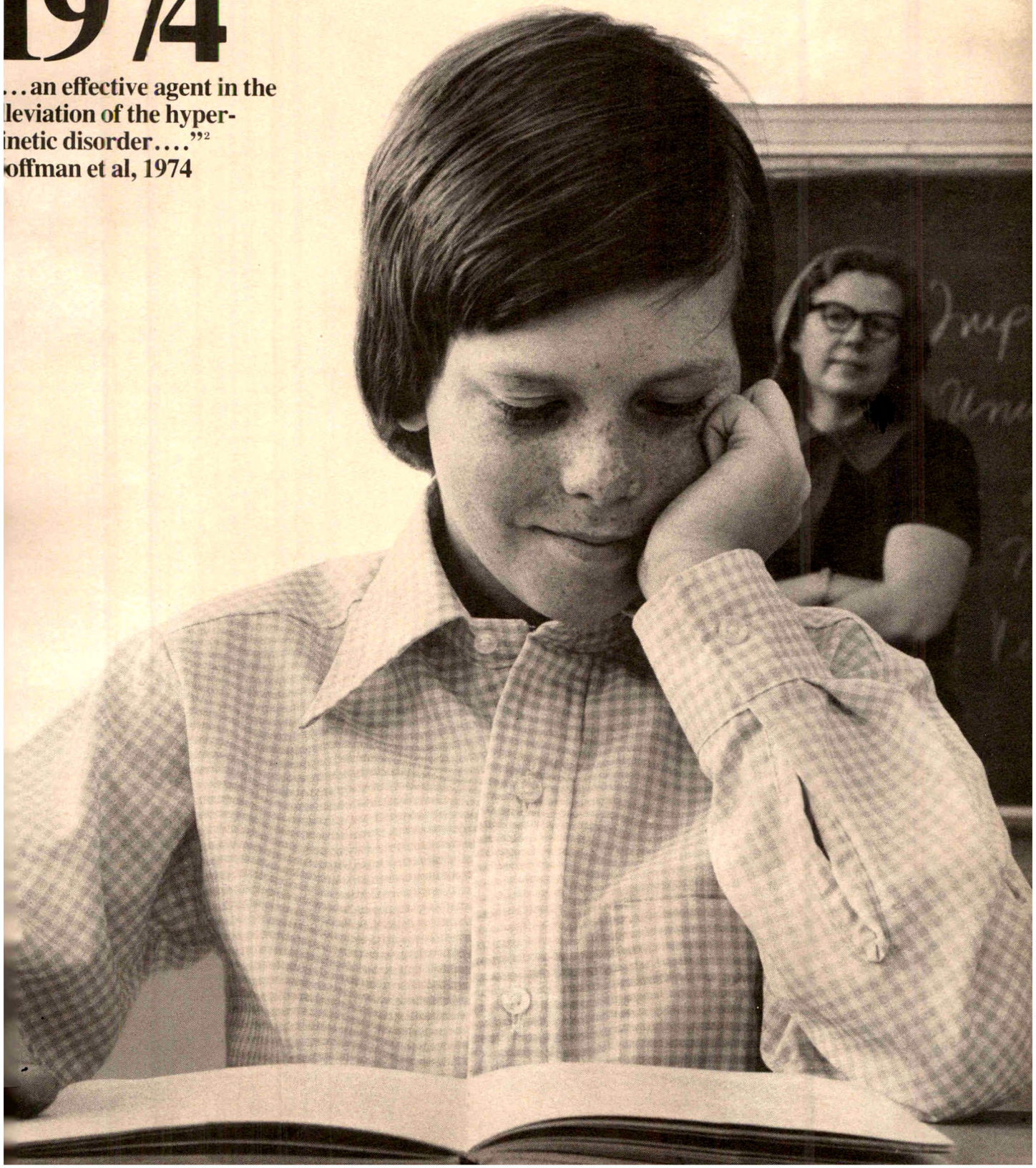
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the treatment of MBD

1974

...an effective agent in the
leviation of the hyper-
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offman et al, 1974





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TABLETS

INDICATION

Minimal Brain Dysfunction in Children—as adjunctive therapy to other remedial measures (psychological, educational, social)

Special Diagnostic Considerations

Specific etiology of Minimal Brain Dysfunction (MBD) is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources. Characteristics commonly reported include: chronic history of short attention span, distractibility, emotional lability, impulsivity, and moderate to severe hyperactivity; minor neurological signs and abnormal EEG. Learning may or may not be impaired. The diagnosis of MBD must be based upon a complete history and evaluation of the child and not solely on the presence of one or more of these characteristics.

Drug treatment is not indicated for all children with MBD. Stimulants are not intended for use in the child who exhibits symptoms secondary to environmental factors and/or primary psychiatric disorders, including psychosis. Appropriate educational placement is essential and psychosocial intervention is generally necessary. When remedial measures alone are insufficient, the decision to prescribe stimulant medication will depend upon the physician's assessment of the chronicity and severity of the child's symptoms.

CONTRAINDICATIONS

Marked anxiety, tension, and agitation, since Ritalin may aggravate these symptoms. Also contraindicated in patients known to be hypersensitive to the drug and in patients with glaucoma.

WARNINGS

Ritalin should not be used in children under six years, since safety and efficacy in this age group have not been established.

Sufficient data on safety and efficacy of long-term use of Ritalin in children with minimal brain dysfunction are not yet available.

Although a causal relationship has not been established, suppression of growth (*ie*, weight gain and/or height) has been reported with long-term use of stimulants in children. Therefore, children requiring long-term therapy should be carefully monitored.

Ritalin should not be used for severe depression of either exogenous or endogenous origin or for the prevention of normal fatigue states.

Ritalin may lower the convulsive threshold in patients with or without prior seizures; with or without prior EEG abnormalities, even in absence of seizures. Safe concomitant use of anticonvulsants and Ritalin has not been established. If seizures occur, Ritalin should be discontinued.

Use cautiously in patients with hypertension. Blood pressure should be monitored at appropriate intervals in all patients taking Ritalin, especially those with hypertension.

Symptoms of visual disturbances have been encountered in rare cases. Difficulties with accommodation and blurring of vision have been reported.

Drug Interactions

Ritalin may decrease the hypotensive effect of guanethidine. Use cautiously with pressor agents and MAO inhibitors. Ritalin may inhibit the metabolism of coumarin anticoagulants, anticonvulsants (phenobarbital, diphenylhydantoin, primidone), phenylbutazone, and tricyclic antidepressants (imipramine, desipramine). Downward dosage adjustments of these drugs may be required when given concomitantly with Ritalin.

Usage in Pregnancy

Adequate animal reproduction studies to establish safe use of Ritalin during pregnancy have not been conducted. Therefore, until more information is available, Ritalin should not be prescribed for women of childbearing age unless, in the opinion of the physician, the potential benefits outweigh the possible risks.

Drug Dependence

Ritalin should be given cautiously to emotionally unstable patients, such as those with a history of drug dependence or alcoholism, because such patients may increase dosage on their own initiative. Chronically abusive use can lead to marked tolerance and psychic dependence with varying degrees of abnormal behavior. Frank psychotic episodes can occur, especially with parenteral abuse. Careful supervision is required during drug withdrawal, since severe depression as well as the effects of chronic overactivity can be unmasked. Long-term follow-up may be required because of the patient's basic personality disturbances.

PRECAUTIONS

Patients with an element of agitation may react adversely; discontinue therapy if necessary.

Periodic CBC, differential, and platelet counts are advised during prolonged therapy.

ADVERSE REACTIONS

Nervousness and insomnia are the most common adverse reactions but are usually controlled by reducing dosage and omitting the drug in the afternoon or evening. Other reactions include: hypersensitivity (including skin rash, urticaria, fever, arthralgia, exfoliative dermatitis, erythema multiforme with histopathological findings of necrotizing vasculitis, and thrombocytopenic purpura); anorexia; nausea; dizziness; palpitations; headache; dyskinesia; drowsiness; blood pressure and pulse changes, both up and down; tachycardia; angina; cardiac arrhythmia; abdominal pain; weight loss during prolonged therapy. Toxic psychosis has been reported. Although a definite causal relationship has not been established, the following have been reported in patients taking this drug: leukopenia and/or anemia; a few instances of scalp hair loss.

In children, loss of appetite, abdominal pain, weight loss during prolonged therapy, insomnia, and tachycardia may occur more frequently; however, any of the other adverse reactions listed above may also occur.

DOSAGE AND ADMINISTRATION

Children with Minimal Brain Dysfunction (6 years and over)

Start with small doses (*eg*, 5 mg before breakfast and lunch) with gradual increments of 5 to 10 mg weekly. Daily dosage above 60 mg is not recommended. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

If paradoxical aggravation of symptoms or other adverse effects occur, reduce dosage, if necessary, discontinue the drug.

Ritalin should be periodically discontinued t assess the child's condition. Improvement r be sustained when the drug is either tempo-rarily or permanently discontinued.

Drug treatment should not and need not be indefinite and usually may be discontinued after puberty.

HOW SUPPLIED

Tablets, 20 mg (peach, scored); bottles of 1(and 1000.

Tablets, 10 mg (pale green, scored); bottles 100, 500, 1000 and Accu-Pak® blister units 100.

Tablets, 5 mg (pale yellow); bottles of 100, 5 and 1000.

Consult complete product literature before prescribing.

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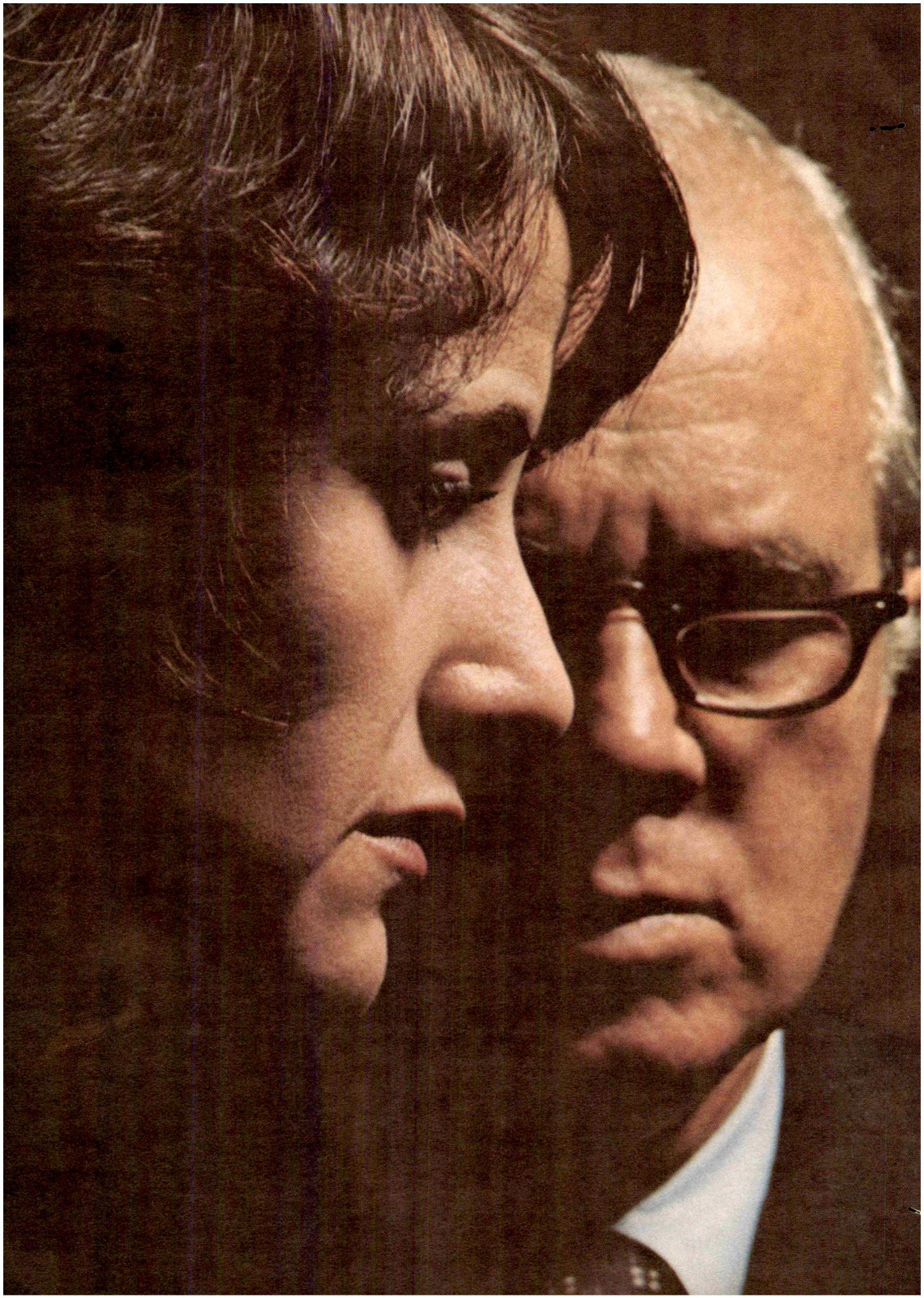
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WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use, with caution in patients with impaired liver function.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

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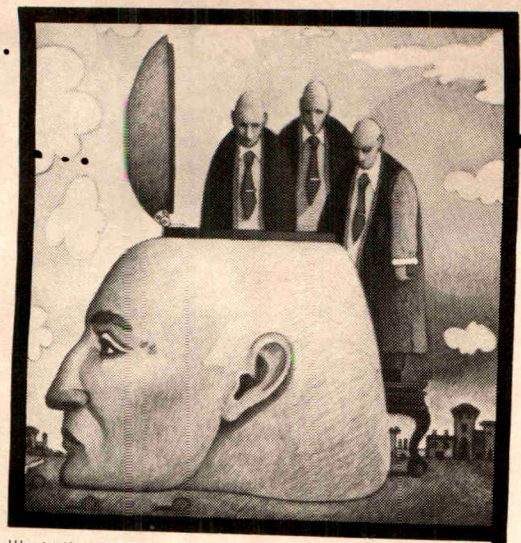


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The Eastern Virginia Inter-Hospital Medical Education Committee will sponsor the Fifth International Gender Dysphoria Symposium in Norfolk, Virginia, February 10-13, 1977. Presentations will be made in the areas of "Psychiatric Aspects of the Gender Dysphoria Syndrome," "Considerations of Male to Female and Female to Male Transsexuals," "Diagnostic Dilemmas and Treatment Failures" and "Follow-Up Studies." Additionally, guest speakers will address such topics as Therapeutic Guidelines, Legal Problems, Nursing Aspects and Theoretical Aspects of the Gender Dysphoria Syndrome. This continuing medical education program will be accredited by the American Medical Association and the associations of the various disciplines involved. All professionals are invited to attend. For registration information contact: Terry Salasky-Coordinator, Gender Dysphoria Symposium, P.O. Box 1980, Norfolk, Virginia 23501.

3/9

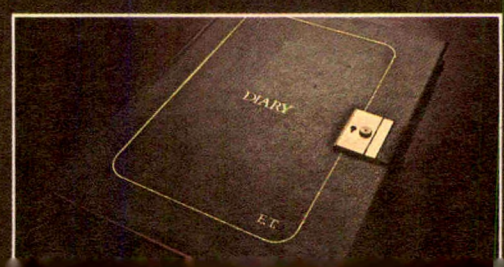
"Haven't noticed the palpitations too much. Not as tense when I turn in."

3/7

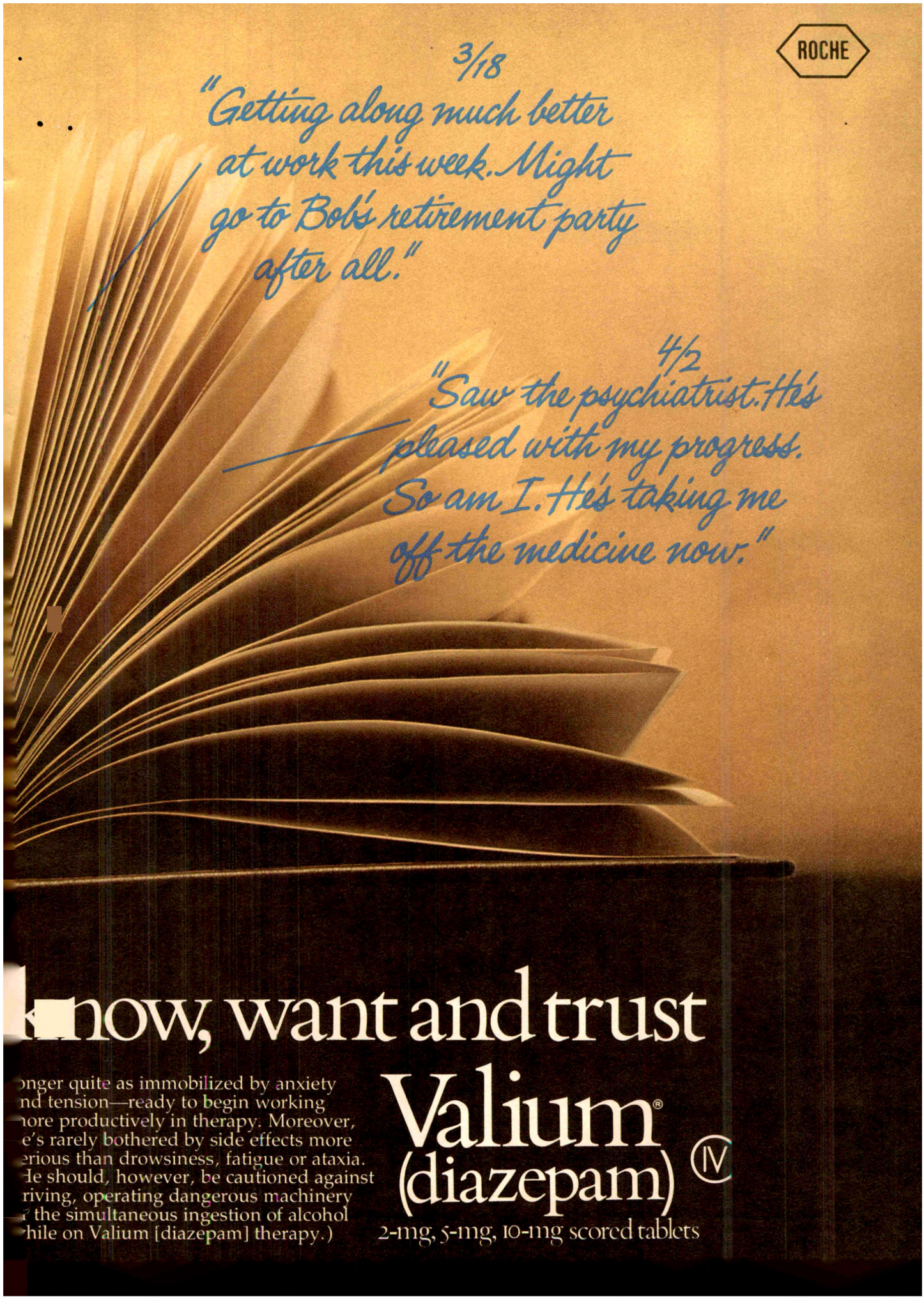
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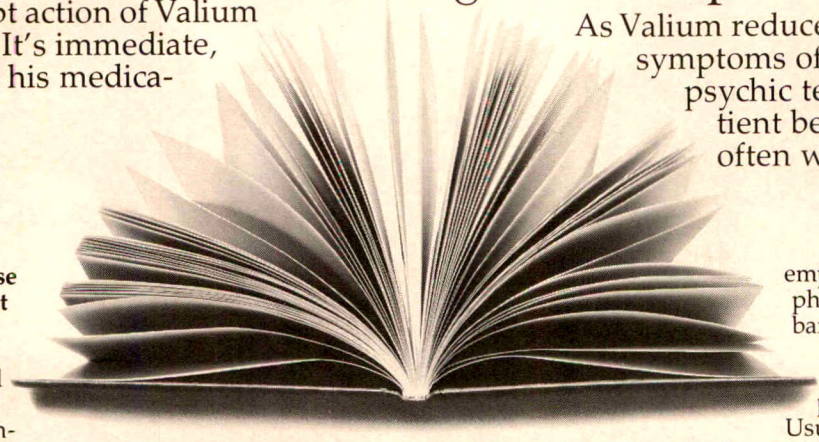
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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium®(diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose®packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

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SECTION HEADINGS: Differential Diagnosis. Emergency Treatment of Opiate Overdoses. Emergency Treatment of Adverse Reactions to CNS Stimulants. Emergency Treatment of Adverse Reactions to Hallucinogenic Drugs. Emergency Treatment of Acute Reactions to Cannabis Derivatives. Emergency Treatment of Inhalation Psychosis and Related States. Emergency Treatment of Acute Alcohol Intoxication. Special Problems.

1976, 328 pp., $16.50/£10.05 ISBN: 0-12-119560-0

CANNABIS AND HEALTH

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The vulnerable ages

The first epileptic seizure is most likely to occur during early childhood and at the onset of puberty

About 9 out of 10 epileptics experience their first seizure before the age of 20—with the highest incidence between 5 and 7, when children start school, and at the onset of puberty, a time of physiological and psychic turmoil.[1] The most common type, grand mal, occurs in approximately 75% of epileptic children,[1] and more than 50% of patients who suffer initially from petit mal develop grand mal seizures before they reach the age of 16.[2]

Mysoline (primidone) for control of grand mal, psychomotor and focal epilepsy

At the onset and afterwards — used alone or as concomitant therapy, MYSOLINE may reduce the frequency and severity of major motor seizures—or even eliminate them. *Excellent* for control of grand mal. Valuable for control of psychomotor[1,3,4] and focal epilepsy as well.[5]

Add Mysoline when control with other anticonvulsants is inadequate — As concomitant therapy, MYSOLINE can improve seizure control in grand mal and psychomotor epilepsy. The combined use of phenobarbital, diphenylhydantoin, and MYSOLINE may have additive anticonvulsant effects without additive side effects.[6]

Change to Mysoline when other anticonvulsants fail — A changeover to MYSOLINE is frequently warranted when other anticonvulsants must be discontinued because of important side effects, or when grand mal seizures are refractory to phenobarbital, with or without diphenylhydantoin.[7]

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Mysoline® (primidone)

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50 mg.
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May be the start of a better life for the epileptic

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7538

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may be the start of a better life for the epileptic

initial and maintenance therapy for
grand mal, psychomotor and focal epilepsy

BRIEF SUMMARY
(For full prescribing information, see package circular.)

MYSOLINE® Brand of PRIMIDONE

Anticonvulsant

ACTIONS: MYSOLINE acts on the central nervous system to raise seizure threshold or alter seizure pattern. The mechanism(s) of action of anticonvulsant drugs is not known.

Primidone has anticonvulsant activity *per se*. In addition, its two metabolites possess anticonvulsant qualities. The major metabolite is phenylethylmalonamide (PEMA); the other is phenobarbital. In addition to its own anticonvulsant potential, PEMA potentiates phenobarbital.

INDICATIONS: MYSOLINE, either alone or used concomitantly with other anticonvulsants, is indicated in the control of grand mal, psychomotor, and focal epileptic seizures. It may control grand mal seizures refractory to other anticonvulsant therapy.

CONTRAINDICATIONS: Primidone is contraindicated in: 1) patients with porphyria and 2) patients who are hypersensitive to phenobarbital (see ACTIONS).

WARNINGS: The abrupt withdrawal of antiepileptic medication may precipitate status epilepticus.

The therapeutic efficacy of a dosage regimen takes several days before it can be assessed.

Use in pregnancy: Recent reports strongly suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Reference has been made to primidone in several cases in which it was used *in combination* with other anticonvulsants; but its teratogenicity has not been conclusively demonstrated. The possibility exists that other factors, *e.g.*, genetic factors or the epileptic condition, may contribute to the higher incidence of birth defects. The data also indicate that the great majority of mothers receiving anticonvulsant medication deliver normal infants.

Anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent major seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and risk to both mother and the unborn child.

When the nature, frequency, and severity of the seizures do not pose a clear threat to the patient, good medical practice requires that the physician weigh the expected therapeutic benefit of anticonvulsant therapy against possible risk on an individual basis.

Neonatal hemorrhage, with a coagulation defect resembling vitamin K deficiency, has been described in newborns whose mothers were taking primidone and other anticonvulsants. Pregnant women under anticonvulsant therapy should receive prophylactic vitamin K_1 therapy for one month prior to, and during, delivery.

The physician should weigh all of the foregoing considerations when treating and counseling epileptic women of childbearing potential.

PRECAUTIONS: The total daily dosage should not exceed 2 Gm. Since MYSOLINE therapy generally extends over prolonged periods, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

In nursing mothers: There is evidence that in mothers treated with primidone, the drug appears in the milk in substantial quantities. Since tests for the presence of primidone in biological fluids are too complex to be carried out in the average clinical laboratory, it is suggested that the presence of undue somnolence and drowsiness in nursing newborns of MYSOLINE-treated mothers be taken as an indication that nursing should be discontinued.

ADVERSE REACTIONS: The most frequently occurring early side effects are ataxia and vertigo. These tend to disappear with continued therapy, or with reduction of initial dosage. Occasionally, the following have been reported: nausea, anorexia, vomiting, fatigue, hyperirritability, emotional disturbances, sexual impotency, diplopia, nystagmus, drowsiness, and morbilliform skin eruptions. Occasionally, persistent or severe side effects may necessitate withdrawal of the drug. Megaloblastic anemia may occur as a rare idiosyncrasy to MYSOLINE and to other anticonvulsants. The anemia responds to folic acid, 15 mg. daily, without necessity of discontinuing medication.

DOSAGE AND ADMINISTRATION: The average adult dose is 0.75 to 1.5 Gm. per day. The initial dose is 250 mg. Increments of 250 mg. are added, usually at weekly intervals, to tolerance, or therapeutic effectiveness, up to daily doses not exceeding 2.0 Gm. A typical dosage schedule for the introduction of MYSOLINE (primidone) is as follows:

Adults and Children Over 8 Years of Age

1st Week 250 mg. daily at bedtime	*2nd Week* 250 mg. b.i.d.
3rd Week 250 mg. t.i.d.	*4th Week* 250 mg. q.i.d.

In children under 8 years of age, maintenance levels are established by a similar schedule, but at one-half the adult dosage. It is best to begin with 125 mg., with gradual weekly increases of 125 mg. a day, to a daily total usually between 500 mg. and 750 mg.

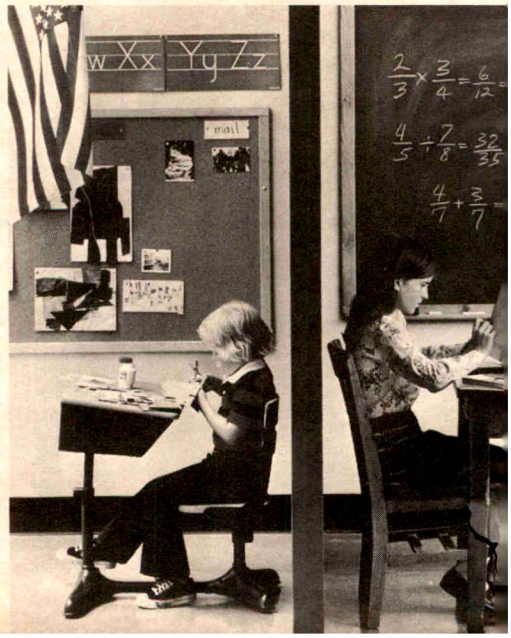
In patients already receiving other anticonvulsants: MYSOLINE should be gradually increased as dosage of the other drug(s) is maintained or gradually decreased. This regimen should be continued until satisfactory dosage level is achieved for combination, or the other medication is completely withdrawn. When therapy with this product alone is the objective, the transition should not be completed in less than two weeks.

MYSOLINE 50 mg. Tablet can be used to practical advantage when small fractional adjustments (upward or downward) may be required, as in the following circumstances:

- for initiation of combination therapy
- during "transfer" therapy
- for added protection in periods of stress or stressful situations that are likely to precipitate seizures (menstruation, allergic episodes, holidays, etc.)

HOW SUPPLIED: MYSOLINE *Tablets*—No. 430—Each tablet contains 250 mg. of primidone (scored), in bottles of 100 and 1,000. Also in unit dose package of 100. No. 431—Each tablet contains 50 mg. of primidone (scored), in bottles of 100 and 500. MYSOLINE *Suspension*—No. 3850—Each 5 cc. (teaspoonful) contains 250 mg. of primidone, in bottles of 8 fluid ounces.

References: 1. Livingston, S.: Comprehensive Management of Epilepsy in Infancy, Childhood and Adolescence, Springfield, Ill., Charles C Thomas, 1972, pp. 6, 7, 584. 2. Grossman, H.J.: Ill. Med. J. *135*:260 (Mar.) 1969. 3. Scholl, M.L., in Conn, H.F.: Current Therapy 1973, Philadelphia, Saunders, 1973, pp. 675-7. 4. Metrick, S.: C.M.D. *37*:49 (Jan.) 1970. 5. Forster, F.M.: Med. Clin. North Am. *47*:1579 (Nov.) 1970. 6. White, P.T.: Wis. Med. J. *68*:178 (Apr.) 1969. 7. Millichap, J.G.: Drug Ther. *1*:15 (Oct.) 1971.



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Antipsychotic medication should not interfere with the patient's ability to participate in your total therapeutic program. That is why Mellaril (thioridazine) is an excellent choice. It is highly effective, and although extrapyramidal symptoms are characteristic of this class of drug, with Mellaril (thioridazine) extrapyramidal stimulation—notably pseudoparkinsonism—is infrequent. Adding an antiparkinsonian agent—which can cause its own side effects—can usually be avoided.

Mellaril (thioridazine) is not habituating and usually does not cause euphoria or undue sedation. (But, warn patients about undertaking activities requiring complete mental alertness.) And Mellaril (thioridazine) is contraindicated in patients with severe hypotensive or hypertensive heart disease.

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TABLETS: 50 mg, 100 mg, 150 mg, and 200 mg thioridazine HCl, U.S.P.

Before prescribing or administering, see Sandoz literature for full product information. The following is a brief summary.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides; carefully consider benefit versus risk in less severe disorders. During pregnancy, administer only when the potential benefits exceed the possible risks to mother and fetus.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy, observed primarily in patients receiving larger than recommended doses, is characterized by diminution of visual acuity, brownish coloring of vision, and impairment of night vision; the possibility of its occurrence may be reduced by remaining within recommended dosage limits. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving), and increase dosage gradually. Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension since phenothiazines may induce a reversed epinephrine effect on occasion. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; rarely, nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—ECG changes (see *Cardiovascular Effects* below). *Other*—Rare cases described as parotid swelling.

The following reactions have occurred with phenothiazines and should be considered: *Autonomic Reactions*—Miosis, obstipation, anorexia, paralytic ileus. *Cutaneous Reactions*—Erythema, exfoliative dermatitis, contact dermatitis. *Blood Dyscrasias*—Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. *Allergic Reactions*—Fever, laryngeal edema, angioneurotic edema, asthma. *Hepatotoxicity*—Jaundice, biliary stasis. *Cardiovascular Effects*—Changes in terminal portion of electrocardiogram, including prolongation of Q-T interval, lowering and inversion of T-wave, and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including Mellaril (thioridazine); these appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence of a causal relationship between these changes and significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms are not regarded as predictive. Hypotension, rarely resulting in cardiac arrest. *Extrapyramidal Symptoms*—Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonus, oculogyric crises, tremor, muscular rigidity, and akinesia. *Persistent Tardive Dyskinesia*—Persistent and sometimes irreversible tardive dyskinesia, characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements) and sometimes of extremities may occur on long-term therapy or after discontinuation of therapy, the risk being greater in elderly patients on high-dose therapy, especially females; if symptoms appear, discontinue all antipsychotic agents. Syndrome may be masked if treatment is reinstituted, dosage is increased, or antipsychotic agent is switched. Fine vermicular movements of tongue may be an early sign, and syndrome may not develop if medication is stopped at that time. *Endocrine Disturbances*—Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. *Urinary Disturbances*—Retention, incontinence. *Others*—Hyperpyrexia; behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses, and toxic confusional states; following long-term treatment, a peculiar skin-eye syndrome marked by progressive pigmentation of skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea; systemic lupus erythematosus-like syndrome.

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THE AMERICAN JOURNAL OF PSYCHIATRY

Child Custody Contests in Historical Perspective

BY ANDRE P. DERDEYN, M.D.

The author reviews the historical background of interparental child custody disputes. The father's superior right to custody in the nineteenth century continued the English common law tradition, but in the twentieth century the mother's claim became superior to the father's, reflecting women's generally increasing rights and the assumption that women are better suited to caring for children. Partly as a result of recent cultural changes leading to a beginning equalization of parental rights and partly because of greater concern for children, courts are starting to focus more on children's emotional needs. It is likely that courts will increasingly call on psychiatrists and other mental health professionals for help in making their decisions.

CONCERN FOR CHILDREN involved in interparental custody contests has recently been increasing. Efforts to change court practices to conform to the needs of children and to improve both the quantity and the quality of psychiatric consultation reflect this new interest.

Knowledge of the historical background of child custody contests affords some perspective on the current trends for change. This paper will touch briefly on practices in the older Western world and will treat in detail developments in the United States up to the present time.

PRACTICES IN THE OLDER WESTERN WORLD

Roman law gave the father absolute control over his children, whom he could sell or condemn to death with impunity (1). This concept of absolute right carried over into English law, where it prevailed until the fourteenth century without appreciable change (2). In the Middle Ages childhood was not seen as the unique phase of life we now consider it to be (3). It was customary to send children as young as 7 into service or apprenticeship, where learning was secondary to the labor a child performed for his or her master (4). The child and the servant appear to have been indistinguishable in terms of how they were treated; even the language often failed to use separate terms for each (3, p. 366). It was not until the sixteenth century that children began to be looked on as being of particular interest, having important and specific developmental tasks to perform, and being worthy of affection.

In eighteenth-century England the father's right to custody was almost without limit (5). Because the father owned or managed all of the family property, there was the practical consideration that, should the child be removed from the custody of the father, the financial support of the child was in question (6). However, the idea began to evolve that custody involved not only rights but also responsibilities for the care of the child. The English courts assumed jurisdiction over the welfare of children under the developing doctrine of parens patriae, which held that the Crown should protect all those who have no other protector (7). Percy Shelley in 1817 was one of the first men to lose custody of his children (8). Custody was refused because of his "vicious and immoral" atheistic beliefs.

The doctrine of parens patriae was given substance in 1839 in Talfourd's Act, which gave the court the power to determine custody of infants under the age of 7. The right of the mother to custody in England was gradually increased in a series of acts until the Guardianship of Infants Act of 1925 proclamed the equality of the mother and father with respect to the custody of their children (9). It was at about the same time that such equality was achieved in the United States.

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DEVELOPMENTS IN THE UNITED STATES TO THE MID-TWENTIETH CENTURY

The Father's Superior Right to Custody

In the United States child custody decisions reflected English common law in that they considered the father to have the superior right to custody. As in England, custody decisions took into account the fact that the father was vastly more competent financially than the mother. An 1826 text stated that "in consequence of the obligation of the father to provide for the maintenance of his infant children . . . he is entitled to the custody of their persons, and to the value of their labor and services" (10, pp. 162–163). An 1824 Rhode Island decision explained that the father's right to custody "is not on account of any absolute right of the father, but for the benefit of the infant, the law presuming it to be for his interest to be under the nurture and care of his natural protector, both for maintenance and education" (11, p. 31).

The right of the father remained superior to that of the mother throughout the last century. An 1842 New York decision stated, "The question then is, which of these parties, the father or the mother, has the best title to the custody of the child? The opinion of this court has been repeatedly expressed that by the law of the land the claims of the father are superior to those of the mother" (12, p. 659). In 1857 a New York judge wrote that a husband with regard to his wife was "wanting in respectful and kind attention to her, and has often used harsh, profane and vituperative expressions to her, and to others concerning her, but he has been guilty of no such misconduct as would justify the wife in a separation" (13, p. 522). The judge added,

> The only difficulty, if any, in the present case, in regard to the right of the father to retain the child, arises from the child being of tender age, and deriving its sustenance, in part, from the breasts of the mother. But upon the evidence, I think these circumstances form no obstacle to the father's right. (13, p. 523)

Custody was thereupon awarded to the father. An 1860 New Hampshire opinion started with,

> It is a well-settled doctrine of the common law, that the father is entitled to the custody of his minor children, as against the mother and everybody else; that he is bound for their maintenance and nurture, and has the corresponding right to their obedience and their services. (14, p. 273)

In a similar vein, it was stated in an 1878 Virginia decision that "the father is the legal custodian of the minor children, and they will not be taken from his custody without the strongest reasons therefore" (15). In that case a wife who refused to live with her husband was denied a divorce and also denied not only custody but visitation with the couple's 4-year-old boy.

An 1881 Arkansas case held,

> It is one of the cardinal principles of nature and of law that, as against strangers, the father, however poor and humble, if able to support the child in his own life style, and of good moral character, cannot, without the most shocking injustice, be deprived of the privilege by anyone whatever, however brilliant the advantage he may offer. It is not enough to consider the interests of the child alone. (16, p. 28)

A consideration of child support at the end of the nineteenth century reflects the financial basis of the father's primary right to custody as well as the relative unimportance of the child's welfare. The historical view of children as essentially the property of the father continued to be influential. An 1891 law text explained the linkage of support with the father's primary right to custody: "As the first duty to support the child rests on the father, he is *prima facie* and before all others . . . entitled to the custody" (17, p. 453). This principle was followed to its logical extreme in some courts, which absolved a father deprived of custody of the duty to support his child. An 1883 Massachusetts case held that "a father is not liable for the support of his minor child, after the custody of the child has been given to the mother by a decree of this court" (18, p. 187). In 1895 a Maine court addressed the same issue, stating,

> When a divorce is granted to a wife, and as a consequence of it she has committed to her the care and custody of her minor child, it follows that the father becomes entirely absolved from the common law obligation which previously rested upon him to support such child. (19, p. 796)

These were by no means idiosyncratic opinions. An 1881 text reads,

> It seems to be a principle of the unwritten law, that the right to the services of the child and the obligation to maintain them go together. The consequence of which would be, that, if the assignment of the custody to the mother extends to divesting the father of his title to the services of the children, he cannot be compelled to maintain them otherwise than in pursuance of some statutory regulation. (20, p. 473)

The concept that a father has some responsibility to children not in his custody developed in statutes and in case law in the early 1900s (21, 22). Up to the present time the courts have quite consistently held to the responsibility of the father to support, regardless of whether or not he has custody. Therefore, an important financial constraint against awarding custody to the mother was removed in the early part of the twentieth century (23).

The Changing Status of Women

Many social changes began to impinge importantly on the issue of custody. By the middle of the nineteenth century the United States was beginning to change from a primarily agricultural, rural society to an industrialized, urban one. There were a number of

indications of important changes in women's place in society: women began to vote, to own property in their own right, and to be gainfully employed in greater numbers. At the same time, the country's new interest in children began to be manifested by the development of public education, children's aid societies (24), and child labor laws (25). Not only did women start to develop more rights and more economic competence, but society, influenced by early interest in child development, stressed the importance of maternal care.

The mother's right to custody was first asserted with regard to young children. As early as 1813, a mother had won custody of daughters 7 and 10 years of age (26). However, the husband, who had previously deserted the family, regained the custody of his daughters 2½ years later (27). An 1840 decision stated the view prevailing at that time:

> The doctrine of the common law has not been overthrown, although it has been weakened in the United States; that still upon a question of guardianship, with the exception of very tender infancy, a positive unfitness in the father must be shown before children can be withheld or withdrawn from his charge. (28, p. 501)

The period during which maternal care was necessary was seen as a short one. A 23-month-old girl was awarded to her mother in 1840 (29) and returned to her father when she was 4 years, 6 months old, on the ground that the child could then be delivered to the father without injury (12). Similarly, in Virginia in 1872 a 3-year-old girl was awarded to her mother, but at age 4 she was given to the custody of her father. The court wrote, "The tender nursing period has passed by, and the time for moral training and impressions has arrived" (30, p. 174).

The mother's right to custody on the basis of the tender years presumption grew rapidly in strength. Late in the nineteenth century a legal writer, after acknowledging the father's paramount right, went on to say,

> There may be cases in which the court, from a consideration of the child's welfare, would not award its custody to the father, even though no fault or neglect of duty could be imputed to him. A child of very tender years needs the care and attention of a mother, . . . at least until it has reached an age when the father can properly care for it. It can only be in such cases as this, where the child, from its extreme youth or sickness, needs a mother's care, that the court can deprive the father of the right to the child's custody, where the father can properly care for the child, and is in every way a fit person to have the charge of it, and has not in any way neglected the child or relinquished his rights. (31, pp. 250–251)

By 1880 a court that awarded a 4½-year-old boy to his mother was able to state the tender years presumption in a more positive fashion: "The claim of a mother during the early years of an infant's life to the care of her child is to be preferred to that of the father" (32, p. 357). The view of most other courts, however, was that the mother's right to custody of a young child was a temporary exemption to the proper scheme of things. As late as 1905, a court that had awarded a 3-year-old boy to his mother because of his young age held 2 years later that "the father, by reason of his paramount right in law, is entitled to the custody of the child" (33, p. 862).

The tender years presumption was one of the first tangible legal issues on which the developing rights of the mother were based. The best interests of the child was the other.

At the turn of the century, when women were gaining new rights and children were generally being accorded more attention, some of the change in the law regarding custody of children was crystallized in the best interests of the child test. Two decisions are credited with its origin. In *Chapsky v. Wood* (34) in 1881 a psychologically astute judge ordered that a 5-year-old girl remain with the maternal grandmother by whom she had been raised rather than being placed in the custody of her father. The judge wrote that the father had the natural right to custody but that the paramount consideration was the welfare of the child. In the second case, *Finlay v. Finlay* (35) in 1925, the judge wrote that in custody cases the judge "does not proceed upon the theory that the petitioner, whether father or mother, has a cause for action against the other or indeed against anyone. He acts as *parens patriae* to do what is best for the interests of the child" (35, p. 626).

The best interests of the child test, although it did signal an enhanced consideration of the child's needs, had more significance in that it reflected the strengthening of the mother's right to custody. When the best interests test came into use in the early years of the twentieth century, the courts were well along in the process of giving the mother the advantage in custody decisions. The best interests test is not a test at all; it is a general principle, expressed in practically every custody decision, and it gives no indication of the degree of attention paid to the child's needs. One article on the child's right to counsel noted,

> The "best interest of the child" is often established by showing the unfitness of a particular parent. The conclusion which follows is that it would not be in the best interests of the child to award custody to that parent. The decision is reached by a process of elimination and justified by a euphemism. (36, p. 111)

Although of questionable value, the best interests test appears in the statutes of 48 states (37). The best interests of the child test has throughout most of its existence primarily supported the mother's claim.

The Mother's Superior Right to Custody

The father's advantage in custody claims was gradually eroded. A 1921 text noted that the courts had considerably modified the idea of the father's paramount right and had adopted "the equitable principle that this

right must yield to considerations affecting the well-being of the child" (38, p. 344). In 1926 a legal writer estimated that regarding the parents' relative entitlement to custody "the father had perhaps a slight advantage over the mother" (39, p. 326).

Soon the mother developed rights to custody far superior to those of the father. A number of factors enhanced the mother's right and ability to have custody of her children. In addition to women's generally increasing rights and economic capability, child support from former spouses became more consistently available. Whereas the father had been presumed to have the right to custody according to the English common law tradition and his greater earning capacity, the mother's right to custody was a moral one based on a developing cultural assumption that the woman was better suited to caring for children (40).

The emphasis on the benefits of mother love occasionally led courts to lyrical extremes. A 1921 opinion reads,

> For a boy of such tender years nothing can be an adequate substitute for mother love—for that constant ministration required during the period of nurture that only a mother can give because in her alone is duty swallowed up in desire; in her alone is service expressed in terms of love. She alone has the patience and sympathy required to mold and soothe the infant mind in its adjustment to its environment. The difference between fatherhood and motherhood in this respect is fundamental. (41, p. 827)

In a similar vein the following was written in 1938:

> There is but a twilight zone between a mother's love and the atmosphere of heaven, and all things being equal, no child should be deprived of that maternal influence unless it be shown there are special or extraordinary reasons for so doing. (42, p. 205)

As late as the 1960s a judge wrote the following regarding the presumption that young children should be placed in the custody of their mothers:

> It is something more than sentimentalism that has led the courts to come to this conclusion. That there is no substitute for the love, companionship, and guidance of a good mother hardly needs any argument. She has the time and opportunity of providing care and comfort to children at times when normally the father is away from home. In many other ways she is the one to whom the children normally look for guidance. (43, p. 784)

Although the decisions have of late lost some of their more colorful rhetoric, the advantage of the mother over the father in custody disputes has continued to be vastly superior in spite of the legislated equality between the sexes (44). Although never legislatively stated, there has been a very strong presumption in favor of the mother (45). In the 1960s it was estimated that the mother was given custody in 90% of contested cases (46). Several years ago writers noted that "instead of equality as between parents the mother's claim to the child is paramount" (47, p. 512). In 1965 a legal observer noted that "regardless of the statutory language as to the equality of parental rights in a custody proceeding, the mother, due to the mystique of motherhood, has an advantage which will be decisive unless she is clearly shown to be unfit" (40, p. 29). This great imbalance regarding the right to custody appears to be changing, however. This will be discussed below.

Parental Culpability

Parental culpability has long been a major determinant in custody decisions. In the nineteenth century the child's best interests were generally thought to be best served by awarding custody to the parent not at fault for the divorce.

An 1857 court wrote,

> The paramount legal right of the father to the custody and education of his child can be interfered with . . . only where he has been at fault in bringing about the separation. It has never been dreamed that, when the mother has been at fault in the occurrences preceding the separation, she should be rewarded for her faults by the interposition of the court. If she breaks up the household and departs from her husband's house, wrongfully, whether it be done of her own purpose, or from weakly yielding to the evil influences of others, she is not to be allowed to take with her the children of the union. (48, p. 31)

The rationale for awarding custody to the innocent party in divorce was provided in an 1873 text:

> One who has conducted either well or ill in a particular domestic relation, will conduct the same in another; and so, as a general practice, the courts give the custody to the innocent party; because, with such party, the children will be more likely to be cared for properly. (49, p. 446)

Using this reasoning, a 1909 opinion explained that the awarding of custody to the innocent party is based "on the theory that better treatment may be anticipated from a person who has observed the marriage vows than from him who has violated them" (50, p. 601).

The emphasis on culpability was particularly marked in the case of adultery. The custody of a 3-year-old girl was awarded to the father in an 1858 case in which the mother's adultery was an issue. The opinion read; "A woman who has been guilty of adultery is unfit to have the care and education of children, and more especially of female children, nor is she entitled to the support out of the husband's estate" (51, p. 263).

Legal texts spanning the 128 years between 1852 and 1968 have reported the inclination of courts to award custody to the innocent party in a divorce, particularly when adultery is involved (20, 31, 38, 44, 52, 53). There are indications that the importance of parental culpability as a guide for awarding custody might have slightly diminished recently.

RECENT DEVELOPMENTS

A variety of important changes have been taking place in the last several years. The mother's superior right to custody appears to be diminishing. There have been changes in the courts and increasing pressures from outside the legal system that are likely to lead to an increasing orientation of the court to the needs of children.

Tender Years Presumption

The tender years presumption has long been the mainstay of the mother's superior right to custody. Change in reliance on the tender years presumption signals perhaps the greatest of the recent developments in the area of interparental child custody disputes. A 1971 Missouri court stated that "the rule giving the mother preferential right to custody . . . is predicated upon the acts of motherhood—not the fact of motherhood" (54, p. 742). A case awarding custody to the father in the absence of unfitness of the mother stated, "The 'tender years presumption' is actually a blanket judicial finding of fact, a statement by a court that, until proven otherwise . . . mothers are always better suited to care for young children than fathers" (55, p. 287). The court went on to say that "the 'tender years presumption' should be discarded because it is based on outdated social stereotypes rather than on rational and up-to-date consideration of the welfare of the children involved" (55, p. 288). Students of this problem concluded,

> The assumption that the mother is a better custodial parent was and is wrong from a historical, economic, sociological, and philosophical point of view. The notion is unfounded because it fails to project the family unit into the post-divorce reality where the mother must assume both a mother's and a father's role (56, p. 53)

The improved economic potential of women has also been recognized in that the mother is increasingly being obliged to contribute to support. In 1975 cases, the sharing of a child's expenses for summer camp was ordered (57), and a father's child support payments were set in relation to the mother's earning capacity in contrast to what her actual earnings were (58). In spite of these indications of change, however, the tender years presumption continues to be a determinant in cases (59), and it remains in the statutes (60).

Sex Discrimination Between Parents

The issue of sex discrimination per se in custody awards is a subject of new concern. The tender years presumption, which holds the young child uniquely in need of maternal care, constitutes differential treatment of the parents on the basis of their sex and is therefore a suspect classification (61, 62) under the Fourteenth Amendment's equal protection under the law clause. This issue was addressed in a 1974 Illinois opinion that stated, "Equality of the sexes has entered this field. The fact that a mother is fit is only one facet of the situation, and standing by itself, it does not authorize a denial of custody to the father" (63, p. 585). Similarly, recent cases have expanded the father's right to his illegitimate child (64–67).

The father is now more often being awarded custody even when the mother is not demonstrably unfit. In 1969 two cases awarded custody to the father, the mother in each case simply being judged less able to meet the demands of childrearing (68, 69). A decade earlier these mothers would likely have been awarded custody because they were not unfit. Even in the absence of flagrant maternal misbehavior or disability courts are more free to award the child to the father when they decide that the child's welfare requires it (70–73).

Parental Culpability

In the past, culpability of one parent with regard to fault for the divorce was almost certain to influence the court to award the child to the innocent spouse. Adultery of one parent usually assured loss of custody of the child.

As the courts have become somewhat more cognizant of the complexities of human relationships, there has been some movement in the area of family law toward relying less on culpability as a means of resolving disputes. There are growing trends toward no-fault divorce and toward the court's making more of an effort to determine whether parental disabilities or misbehavior are likely to interfere with parenting ability. For example, maternal adultery does not of itself deprive the mother of custody to the degree that it once did (74). In recent cases a mother living with a man extramaritally was awarded custody (75), and a father living in similar circumstances was allowed visitation (76).

It must be remembered that this discussion regards a nascent trend. The emphasis on parental culpability appears to have suffered only a slight decline. A focus on culpability provides a convenient formula for deciding very difficult issues; such conveniences are not easily given up. In addition, the emphasis on culpability has other derivatives; e.g., the awarding or the deprivation of custody of a child has some connotations of rewarding or punishing parents (77). The human penchant for obscuring difficult decisions with a moralistic overlay of right and wrong or reward and punishment can be relied on to maintain culpability as an eternally important issue. Nebraska law still does not allow an adulterous mother to have the custody of her child (78), and Maryland's no-fault divorce law creates a presumption against custody by an adulterous mother (79). California's no-fault divorce law excludes fault as an issue in divorce proceedings but not in custody disputes, in which fault remains a major issue (80).

Consideration of the Child's Needs

The fourth important area of change is the only one that is primarily child oriented. The appointment of a

guardian ad litem in custody disputes has become more common in recent years (81, 82). However, when agreements concerning custody have been made by the parents before the hearing the guardian ad litem has not generally been appointed (83), and the court has tended to accept whatever disposition of the children has been agreed on by the parents. However, a 1975 Wisconsin decision was nullified and the matter returned to the lower court because that court had failed to appoint a guardian ad litem to consider the custodial issue (84).

In 1974 the American Bar Association approved the Uniform Marriage and Divorce Act, model legislation that will influence new state laws (85, 86). It contains three proposals that would improve somewhat on current practices (87). First, access to litigation to modify custody is prohibited for 2 years after the issuance of a custody decree in the absence of evidence of serious harm to the child. Second, the court may appoint for the child an attorney who has more prerogatives than the guardian ad litem. Third, the court may order a custody investigation, which may include professional consultation. As is the case with the appointment of the guardian ad litem in current practice, the Uniform Marriage and Divorce Act proposals would limit the appointment of counsel and the ordering of a custody investigation to contested cases (88). However, a decision of a lower court in Pennsylvania that honored a parental custody agreement was recently nullified, and the lower court was ordered to make an investigation of the possible custody situations so that it could decide what was best for the children (89).

Child Custody in the 1970s

An 1850 treatise contains a passage that still applies:

> The state of the law relating to the custody of the persons of infants is not very satisfactory. Not only are there defects which can, perhaps, be remedied only by the authority of the Legislature; but there prevails an uncertainty in the application of the law, as it exists, to the difficult cases which frequently arise in connection with the disposal of minor children. (90, p. 7)

In 1850, divorce-related custody problems were uncommon in comparison with today. When the federal Constitution reserved the regulation of marriage to the states, there was no established mechanism for states to deal with divorce because there were no ecclesiastical courts in the new nation. Because of social and religious emphasis on the indissoluble nature of marriage, this lack did not at first present much of a problem. Initially, divorces were granted by special legislative acts, but general divorce laws began to be enacted in the middle of the nineteenth century (91). There were an estimated 10,000 divorces in 1867 (.3 per 1,000 population) (92). In 1973 there were 913,000 divorces (4 per 1,000 population) (93). Divorce, with its attendant developmental liabilities (94), is affecting vast numbers of children and poses a problem of much more than just academic interest.

The major recent changes relating to the custody of children revolve about alterations in the relative advantages of parents with respect to custody. The weakening of the tender years presumption, the increasing concern about discrimination by sex, and the moderate decrease in emphasis on parental fault in awarding custody all herald a trend toward equalization of the struggle for custody between former spouses. An important effect of this equalization is that it requires judges to exercise ever-increasing freedom or discretion in each interparental custody decision.

The child's interests may have more importance in the courts at present because of the trend toward equalization of the rights of parents. With fewer parent-oriented formulas available as guidelines, courts appear to be inclined to try to learn more about the needs of the child. As mentioned above, there has been a moderate increase in the court's considering children's needs with regard to appointment of a guardian ad litem and making custody investigations.

Psychiatric interest in this area has been a factor of growing importance. Anna Freud's seminars at Yale Law School led to publication of an influential law review article in 1963 (95). In a 1969 article Watson developed a technique for determining the psychological best interest of the child involved in a custody dispute (96). In 1973 Goldstein and associates published *Beyond the Best Interests of the Child* (97), which is being widely read within both the legal and the mental health professions. These publications are serving to make lawyers and judges much more aware of the problematic situations facing children in custody contests as well as the importance of making the decisions conform to the developmental needs of the children involved.

CONCLUSIONS

The current situation regarding custody contests in the courts has some analogies to the period at the end of the nineteenth century, when the primary right of custody began to shift from father to mother. The major recent changes revolve about alterations in the relative advantages of parents with respect to custody. The trend toward equalization of parental rights has decreased judicial reliance on parent-oriented formulas for decision making in interparental custody disputes. I have elaborated elsewhere (83) the function of these presumptions in providing a structure that relieves judges of some of the extremely broad discretion they possess (and often dread). In addition, there is a growing awareness of the importance of determining the child's emotional and developmental needs and relating them to the people and environments being contested in court.

As a result of these recent influences it is likely that courts will increasingly call on psychiatrists and other mental health professionals to aid in these difficult decisions. It is also to be expected that the psychiatrist's

role as "child development consultant" (83, p. 797) will be subject to further development and definition. At the present time, some rigid assumptions of long standing are gradually being eroded. The opportunity may now exist to enhance appreciably the rights of children in custody disputes. With the active participation of the psychiatric profession, the child and his or her needs can become and remain the focal issue in custody contests.

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A New Section in the *Journal*

The *Journal* is pleased to announce the inauguration of a new section, "Clinical and Research Reports," which will appear monthly beginning with the January 1977 issue. This section will include reports on new clinical or laboratory observations, single cases of unusual interest or importance, descriptions of preliminary studies, and well-developed suggestions for future research. Reports should not exceed 1,000 words and may contain at most 1 table and 8 pertinent references (figures will not be used). Submissions will be reviewed by at least one referee and the Editor. It is anticipated that the publication lag will be considerably less for Reports than for other articles in the *Journal*. Submissions are welcome immediately; authors will be informed by postcard of the disposition of their papers.

Reports should be submitted in duplicate, double-spaced, with tables and references typed on separate sheets. The designation "Clinical and Research Reports" should appear in the upper right corner of the title page, and complete addresses and affiliations, as well as a telephone number of the author designated to handle correspondence, are required.

Generic and Trade-Name Antipsychotic Drugs: Clinical Equivalence

BY CHING-PIAO CHIEN, M.D., RICHARD LABRIE, PH.D., CHOONG-GUEN PARK, M.D., JONATHAN O. COLE, M.D., AND WILLIAM M. WERNER, M.D.

The clinical inequivalence of generic versus trade-name drugs has been reported for nonpsychiatric drugs but rarely for psychotropic drugs. Recent expiration of patents on some psychotropic drugs has made the evaluation of the clinical equivalence of generic versus trade-name drugs a matter of interest from methodological, sociopolitical, and economic aspects. The authors discuss these points, with emphasis on methodology, in their report of a double-blind study of the efficacy of chlorpromazine and Thorazine in the treatment of 54 acute schizophrenic patients. An analysis designed to infer the maximum possible advantage of Thorazine over generic chlorpromazine indicated that differences between the two were clinically insignificant.

FOR AT LEAST the past 10 years there has been a heated professional and political debate over the virtues and weaknesses of generic drugs. Some of the concern has grown from the vast expansion of third-party payment systems providing coverage for the treatment of illness and the rapidly rising costs of such coverage. Even though expenditures for drugs constitute only a minuscule proportion (1%) of hospital costs (1), the apparent affluence of the pharmaceutical industry has made the attacking of drug costs, the deification of generic (i.e., inexpensive) drugs, and the vilification of brand-name (i.e., expensive) drugs a favorite indoor sport for both politicians and health administrators. On the other hand, representatives of organized medicine and pharmacy (2, 3) have attacked the use of generic drugs because of their alleged inferiority to brand-name products. Sadove (4) cited 31 factors that could significantly differentiate a generic drug from a brand-name product. They include size of crystal or particle, its forms, and isomers; coatings, number, and types; diluent; pH; solubility; ionization of ingredients; surface tension-surface active agents; and dissolution and disintegration rate.

There is reasonable evidence that the generic form of some drugs (principally antibiotics but also tolbutamide and diphenylhydantoin) provides significantly inferior blood levels of the active agents (2–8). An anesthesiologist has documented some practical problems that he has encountered using generic drugs, often in the form of injectable preparations (9).

Until recently, the issue of generic equivalence in psychopharmacology has been moot simply because all of the new and more effective drugs—antipsychotic, antidepressant, and antianxiety agents—were made under patents that are only now beginning to expire. The exceptions to the rule have not provided the incentive to develop the needed comparative methodology. Reserpine, a common drug in the treatment of hypertension, has not been used recently in the treatment of schizophrenia. *d*-Amphetamine has not been widely used in psychiatry. The generic form of meprobamate became available 10 years ago due to a complicated legal situation. However, because the usefulness of meprobamate is restricted almost exclusively to mild and often transitory emotional or musculoskeletal conditions where it is only slightly better than placebo (10), one might never be able to determine whether or not the generic form is equal to Equanil or Miltown. Lithium carbonate, the only other generically marketed medication among the newer drugs, is not metabolized by the body, and monitoring of blood levels has replaced clinical tests of equivalence.

The recent expiration of the patent on chlorpromazine presents the first opportunity and incentive to establish a methodology for testing clinical equivalence of the effectiveness of generic chlorpromazine and the trade-name drug, Thorazine. Current trends noted in the Food and Drug Administration's acceptance of lithium carbonate (where 3 companies were required to perform efficacy trials of their products despite overwhelming evidence from abroad that lithium carbonate was effective in the treatment of mania [11]) suggest that generic equivalence is not likely to be determined solely by chemical identity but will also entail testing equivalence in clinical therapeutic effect.

In a study of generic chlorpromazine (12), chronic hospitalized patients were treated in a crossover design. Not only is such a design a time-consuming procedure but, given the increasingly large number of treatment-

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Drugs were provided by Mr. William Mounce of Franklin Laboratories, Philadelphia, Pa.

resistant chronic patients available for study, it also seems quite possible that neither form of chlorpromazine might have any major effect on psychopathology. Proving equivalent ineffectiveness could be a very unsatisfying pursuit. A direct comparison of generic chlorpromazine with Thorazine in newly hospitalized patients is a more critical test of the similarity of therapeutic efficacy. In our opinion, the ability of an antipsychotic drug to markedly reduce psychopathology in acute patients is more crucial than the drug's ability to modulate psychotic symptoms in chronically institutionalized patients.

The opportunity presented by this comparison of a generic with a standard brand-name phenothiazine led us to also reevaluate available statistical approaches to this problem. The approach we used does not simply say that the two drugs were not statistically significantly different from each other. Instead, it provides a reasonable outer limit, in terms of the measures used in the study, for the greatest probable difference between the drug forms studied, on the conservative assumption that the real difference found in the study might, by chance, have unduly favored the generic drug.

METHOD

Fifty-four patients newly admitted to one unit of Creedmoor State Hospital who, in the judgment of the treating physician, required antipsychotic medication were randomly assigned to Thorazine (N=23) or generic chlorpromazine (N=31).[1] Patients with physical illnesses contraindicating antipsychotic drug therapy were excluded from the study. Those who had been medicated continuously for more than 2 days immediately before admission were not recruited for the study. The patients were assigned to the same treating physician throughout the study period in order to ensure the consistency of the prescribing pattern. Patients were given a routine clinical diagnosis as well as a computer diagnosis using Overall's procedure (13) with the Brief Psychiatric Rating Scale (BPRS) (14).

The procedure developed by Overall combines the BPRS ratings to obtain composite scores characteristic of 13 psychiatric stereotypes. These scores are further reduced to 3 scores that have been shown to discriminate among the following major conditions: high depression versus low paranoia, schizoid versus others, and manic versus others. The mean discriminant scores for the 2 drug groups were compared using a procedure for testing the differences of several means (Hotelling's t^2). The 2 groups did not differ in their major psychiatric symptoms as measured by the BPRS. As indicated in table 1, there were no significant differences between the groups in other pretreatment measures and demographic data, such as age, age at onset of illness, number of previous hospitalizations, and total scores on the BPRS and the Nurses' Observation Scale for Inpatient Evaluation (NOSIE). Men comprised 48% of the Thorazine group and 32% of the generic chlorpromazine group. Physicians' ratings of severity of illness were as follows: mild, 9% for the Thorazine group and 7% for the chlorpromazine group; moderate, 65% versus 58%; marked, 13% versus 32%; and severe, 13% versus 3%.

TABLE 1
Pretreatment Characteristics of the Two Study Groups

Item	Thorazine (N=23) Mean	Thorazine (N=23) SD	Chlorpromazine (N=31) Mean	Chlorpromazine (N=31) SD
Number of previous hospitalizations	2.65	1.70	2.63	1.60
Age at onset of illness (years)	21.60	12.30	25.50	9.80
Present age (years)	40.20	13.30	43.70	14.40
BPRS total score	51.00	11.50	52.10	10.60
NOSIE total asset score	69.80	11.30	64.60	15.50

During the 4-week study period that began immediately after the baseline ratings were obtained (usually on the first day of hospitalization), only oral antipsychotic medication was given. In this double-blind study, tablets containing 50, 100, and 200 mg of chlorpromazine were available for each patient in individually numbered containers. Dosage was determined by the treating physician, with no upper limit specified. If the patient's psychiatric state necessitated parenteral medication, intramuscularly administered sodium amytal was used. Antiparkinsonian medication was not routinely given but was available as needed to treat emerging neurological side effects.

RESULTS

Therapeutic Effect of Chlorpromazine Treatment

All patients showed marked improvement during the 4-week study period regardless of drug received. Table 2 shows the groups' total mean scores on the BPRS and NOSIE before treatment, at 2 weeks, and at 4 weeks. The BPRS has a total minimum score of 18 when all characteristics of symptoms are rated as absent (1 point each) and a theoretical maximum of 126 when all symptoms are rated as extremely severe (7 points each). The week 4 ratings for each drug group showed an approximately 73% reduction in symptoms. It is clear that both drugs produced significant therapeutic improvement in most of the patients. The Thorazine group showed significant improvement on 16 of the 18 BPRS items and the generic chlorpromazine group, on all 18 items.

Nurses' ratings of the patients' ward behavior using the NOSIE schedule also showed major improvement, with a total improvement of 19% for the Thorazine

[1]Informed consent was obtained from all the patients after the nature of the procedure had been fully explained.

TABLE 2
Changes in Total Mean Scores for the Two Study Groups

Measure	BPRS		NOSIE	
	Thorazine (N=23)	Chlorpromazine (N=31)	Thorazine (N=23)	Chlorpromazine (N=31)
Pretreatment	51.00	52.10	69.80	64.60
Week 2	35.91	37.39	79.00	71.93
Week 4	26.35	27.42	81.17	79.19
Change to week 2	−15.09*	−14.71*	9.22**	7.36***
Change to week 4	−24.65*	−24.68*	11.39**	14.61***

*p=.001, paired t test.
**p=.01, paired t test.
***p=.05, paired t test.

patients and 28% for the generic chlorpromazine sample. By the end of the study period the Thorazine group showed significant mean changes on 5 of the 7 NOSIE scales, and the generic chlorpromazine group on 6 scales.

Physicians' and nurses' clinical global ratings of improvement at 4 weeks indicated that only 3 of the 54 patients (5.6%) showed no change; all the others were rated as improved, with 16 patients (30%) rated as much improved. A total of 50 patients (93%) were rated by physicians as at least moderately ill at the beginning of the study, compared with only 9 (16%) at the end of the study.

Manifest side effects (e.g., drowsiness, rigidity, tremor) were slightly, but not significantly, more common among Thorazine patients (53% versus 41%).

Differences in Treatment Schedules

The study was designed to allow the treating physician, who was blind to the type of actual preparation, to determine the effective dosage for each patient. Under these conditions the generic chlorpromazine patients received, on the average, 21% more drug than did the Thorazine patients. The mean dose of Thorazine was 384 mg every day, and the mean dose of generic chlorpromazine was 463.8 mg every day. The wide range of doses employed in this and generally all clinical settings produced large and nearly identical standard deviations of 298.2 for the Thorazine group and 298.1 for the generic chlorpromazine group. The difference between means was not statistically significant (t=0.955, p=.35). Dosage was significantly related to improvement as measured by the BPRS total score at weeks 2 and 4, NOSIE total assets at weeks 2 and 4, nurses' ratings of severity of illness at weeks 2 and 4, and physicians' ratings of severity at week 2.[2] Because of the positive correlation between amount of drug and amount of improvement and the larger average doses for the subjects receiving generic chlorpromazine, the analyses of outcome were adjusted for the amount of drug received.

Comparative Therapeutic Effect of Two Preparations

The analyses of covariance, adjusted for amount of drug received, failed to reject the null hypothesis of no difference between drug treatments for all the major outcome measures.[3] The analyses of the individual scale items showed that subjects receiving Thorazine had made greater improvement at week 2 on the NOSIE ratings of social competence and retardation and the BPRS rating of disorientation.[4] These differences disappeared by week 4, when no individual scores were significantly different between the 2 drug groups.

After adjustment for the larger average dosage of generic chlorpromazine, the outcome measures did not show any instance where the 2 drug treatments were significantly different at the end of the study period. The 2 drug formulations were equally effective in producing major improvements in the mental status of the patients.

Test of the Similarity of the Two Preparations

Unfortunately, classical tests of the difference between 2 groups, as those reported, emphasize the reduction of type I error (the probability of finding a difference when no difference exists). In a direct comparison where the tests fail to reject the null hypothesis, one is left to consider type II error (the probability of finding no difference when a true difference does exist). Establishing the amount of type II error in a statistical comparison is not possible without knowing the "true" difference. LaBrie and associates (15) have reported on the procedure for inferring the limits of the true difference when type II error is at a minimum. Briefly, the procedure is to establish the maximum relative superiority for the standard that may be inferred from the observed differences and the standard error of those differences.

Classical procedures reduce error with an increase in the number of observations and thus increase the significance of observed differences. Under such conditions, small and perhaps not clinically useful differences might reach the level required to reject the null hypothesis of no difference. LaBrie and associates' procedure does not penalize researchers for attempting to gain precision with larger samples of patients, but rather uses the decreased error from such experi-

[2]There was no indication of significant curvilinearity in these relations as determined by fitting a quadratic equation to the data.

[3]Analysis of covariance may not provide a perfect adjustment for dose differences, but given the absence of significant curvilinearity and dose differences, any remaining treatment differences not completely adjusted for by the covariance analysis must be considered slight.

[4]A total of 50 tests of group differences were performed. At the chosen level of significance (p=.05), 2.5 of these 50 tests could be expected to be significant by chance when no difference existed between the groups. The three differences noted are nearly the expected number of significant differences that would result from chance.

TABLE 3
Inferred Maximum True Differences Between the Two Groups

Measure	Adjusted Means		Standard Error of Difference	Observed Mean Difference	Maximum Probable Thorazine Mean	Maximum Probable Mean Difference
	Thorazine	Chlorpromazine				
BPRS total score	26.76	27.01	2.24	0.25	23.10	3.91
Change to week 4	24.60	24.73	3.37	0.13	30.10	−5.37
NOSIE total asset score	80.53	79.83	4.24	−0.70	87.50	−7.67
Change to week 4	10.73	15.28	4.08	4.55	17.50	−2.22
Physicians' rating of severity, week 4	2.25	2.39	0.30	0.14	1.76	0.63
Nurses' rating of severity, week 4	2.99	2.93	0.30	−0.06	2.50	0.43

ments to more accurately and narrowly define the limit of possible true difference.

To attempt to clarify this issue, the concept of the critical ratio must be introduced. For most tests of significance used in clinical studies the means of the observations and the standard deviations of these observations are presented. The critical ratio is the ratio of the difference between the means to the standard error of the differences; this allows treatment contrasts to be expressed in standardized units independent of the actual measurements employed in the study.

Given the critical ratio of the differences between 2 drug treatment groups in a clinical study, one can calculate the probability that the difference would be observed if the groups were the same. This is the usual test for differences between types of treatment. One can also use this statistic to determine what the biggest difference between the 2 treatments could be, given that the observed actual study differences might occur with a probability of no less than 1 in 20 ($p=.05$). One can therefore state with some assurance that the biggest probable difference between 2 similar treatments is of a specific size. The method used in this study gives such an answer. This difference can then be interpreted clinically as to its meaningfulness.

The results of applying this procedure to the global outcome measures in this analysis are reported in table 3. The table should be read in the following way. The observed mean difference on the BPRS total score was 0.25, while the maximum probable mean difference was calculated to be 3.91 at the 5% level. BPRS change from baseline to week 4 showed an observed difference in favor of generic chlorpromazine of 0.13 scale points; the maximum probable mean difference in favor of Thorazine was − 5.37 scale points.

Differences in Dosage Schedules

Because the treating physician was responsible for determining the dosage schedule of each patient, we can analyze the relative amounts of drug given each group and the number of changes in dosage. As reported earlier, the group receiving generic chlorpromazine was given 21% more drug than the Thorazine group. This difference was not statistically significant. The Thorazine group required an average of less than 1 change in dosage during the trial period (mean=0.609), while the generic chlorpromazine group required significantly more (mean=1.194, $p=.05$). Since most of the study patients had been admitted to the same hospital before, the treating physician was able to consult their records and start from the dosage that had previously been considered optimal. This may account for the relatively infrequent change in dosage. Furthermore, the random assignment of patients to 2 drug groups equates the distribution of the 2 groups among each of 3 treating physicians so that the differences in the physicians' prescribing patterns are also equally distributed between the groups.

In summary, the experience provided by this study indicates that the treating physicians made significantly more dosage adjustments in the generic drug and eventually prescribed larger doses of it. Thus the generic formulation used in this study is a little less potent on a milligram/kilogram basis, and treatment with the generic formulation may require more adjustments to achieve the most effective dosage. However, treatment response in our study was not affected by the difference in frequency of dosage change.

CONCLUSIONS

Other investigators have reported the inequivalence of generic and trade-name nonpsychiatric drugs. However, the issue of generic equivalence in psychopharmacology has just recently begun to receive attention. The impetus behind this concern was primarily triggered by the expiration of patents on some popular psychotropic drugs and the proposed legislation for using inexpensive generic drugs for recipients of public assistance. In this study we attempted to explore a method of data analysis for evaluating the similarities and differences between a generic and a trade-name psychotropic drug.

Fifty-four newly admitted patients who required antipsychotic medication were randomly assigned to Thorazine or generic chlorpromazine. Dosage was determined by the treating physician. At the end of the 4-week study most of the patients showed significant improvement; there was no significant difference between the 2 groups as measured by the BPRS, NOSIE, and physicians' and nurses' ratings of severity of illness. Analysis designed to infer the maximum possible advantage of Thorazine over generic chlorpromazine indicated that differences between the 2 drugs were clinically insignificant.

We found that due to the relatively wide range of therapeutic dosage in a given neuroleptic, the differential therapeutic efficacy between generic and tradename neuroleptics may not be a serious problem in clinical practice if the inferred maximum true difference between the two drugs is not remarkable.

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Self-Reports Versus Sleep Laboratory Findings in 122 Drug-Free Subjects with Complaints of Chronic Insomnia

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The authors compared the sleep laboratory recordings of 122 drug-free subjects who complained of chronic insomnia with the subjects' estimates of their habitual sleep characteristics and their estimated sleep time on the morning after sleeping in the laboratory. Most subjects consistently underestimated the amount of time they slept and overestimated the amount of time it took them to get to sleep in comparison with laboratory data. All subjects consistently underestimated the number of arousals they experienced. The authors discuss the implications of these findings for the treatment and definition of insomnia and for further research.

SEVERAL SURVEYS (1–6) have suggested that the number of people in the United States who complain of insomnia may well be in the millions. One of the most provocative of these surveys, because insomnia was not its specific focus, was Hammond's prospective study of risk factors in coronary heart disease, stroke, and cancer, in which 1,064,004 men and women were surveyed (2). Hammond and Garfinkel (2, 7) found that 13% of men and 26% of women over the age of 30 surveyed complained of insomnia. The incidence of the complaint increased with age, reaching a plateau in the fifth decade. In addition to these prevalence data, Hammond and Garfinkel also presented evidence that the complaint of insomnia is an important mortality risk factor.[1]

Another indication of the magnitude of the insomnia problem is the size of the industry involved in treating the complaint. For example, Balter and Levine (8) estimated that the cost for retail prescriptions of hypnotics in 1970 was $170,000,000. This widespread use of hypnotic medications has also made accidental overdosage in people using or abusing these compounds a substantial health hazard (9).

In contrast to the scope of the problem, the current data describing objective sleep characteristics of people who complain of insomnia are relatively sparse. At the time of writing, we were able to locate 20 reports of polygraphic sleep studies in clinically defined insomniac patients (10–29). The number of patients in these reports ranged from 1 to 20 (mean=8), and the number of drug-free or placebo nights recorded for each patient ranged from 1 to 10 (mean=3). Most of the samples were small and from many different laboratories, with whatever variability the local technology and procedures may have introduced; there was also tremendous variation in the sample characteristics, duration of the complaint, and recent use of hypnotics. In the cases of multiple papers from a single laboratory, it was often very difficult to know whether the same patients were reported in 2 or more publications. Another serious problem was the failure to specify whether the patients were taking sleeping pills at the time of the study or the duration of drug withdrawal if they were said to be drug free. Data from patients who had abruptly withdrawn from sleeping pills shortly before the recordings might have been artifactual (30). Well over half of any large population of individuals who complain of insomnia are likely to be using one or more sedative drugs on a daily basis (31). We may conclude that these studies do not provide a reliable description of insomnia; their extreme variability defies a coherent summary.

Somewhat more systematic studies have been carried out on nonclinical populations of self-defined "poor sleepers," restless sleepers, and the like, e.g., Monroe's classic investigation (32). However, these nonclinical groups may represent a different population from patient groups.

A large, standardized, "definitive" laboratory study of thousands of patients complaining of insomnia is certainly not feasible at the present time. Nonetheless, it is hoped that satisfactory progress can be made

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[1]Everyone interested in sleep disorders is indebted to Dr. Daniel Kripke for calling attention to these data. Dr. Kripke is now in possession of Hammond's raw data and is attempting to show relationships with other risk factors that might help interpret the effect of this sleep complaint on life span.

through systematic accumulation of data on larger samples of patients by various laboratories involved in clinical sleep studies. Our own case series of individuals who complained of chronic insomnia and who have been studied polygraphically in a drug-free condition now numbers 122. This paper will describe the relationship of their self-reports on their sleep characteristics to objective sleep laboratory recording values. Subsamples of the same group of 122 subjects have been reported on elsewhere (33–35).

SUBJECTS

The 122 subjects reported on in this study were drawn from two general groups whose sleep was recorded between 1970 and 1975. All of the subjects gave informed consent for sleep recordings. Patients referred by physicians to the Stanford University Sleep Disorders Clinic for evaluation of a complaint of chronic insomnia accounted for 59 of the subjects. The remaining 63 were recorded while they were participating in specific research protocols, usually involving the evaluation of hypnotic compounds. Of the 63 volunteers who were accepted for study, 48 had consulted physicians for their sleep problems.

In order to determine whether the two sources of subjects resulted in substantial differences in sleep, the subjects referred from each source were compared on the basis of 13 variables used to characterize sleep. These 13 variables included total sleep time; sleep latency; percentage of sleep time; wake time after sleep onset; number of arousals lasting 15 seconds or longer; minutes of stages 1, 2, 3, 4, and REM sleep; estimated total sleep time; estimated sleep latency; and estimated number of arousals. Only 1 variable showed a significant difference between the two subject sources: the number of arousals was higher ($p<.01$, Student's t test) in the clinic patients (mean=20.9 arousals) than in the subjects who volunteered for research studies (mean=15.0 arousals). Because this was the only difference, we felt that the 122 subjects were representative of people with chronic complaints of insomnia severe enough for them to consult a physician and therefore should be considered as a single group.

Patients who were found to have sleep apnea (36) were not included in this summary, nor were a small group of patients found to have nocturnal myoclonus (37) whose sleep measurements have been reported elsewhere (38). Although we are quite certain that none of the 122 individuals reported on in this article had sleep apnea, we are not sure that the same applies to nocturnal myoclonus because many of the patients were studied before the condition was specifically ruled out.

All subjects were drug free at the time of the sleep recordings. Drug-free status was generally verified only by subject report; however, many patients followed in the Stanford Sleep Disorders Clinic had completed a specific drug withdrawal program before the recording sessions. If a patient's report was clearly doubtful, blood and urine samples were tested. The sleep recording itself was also helpful in verifying drug-free status because most hypnotics produce characteristic effects on overall EEG patterns. Two volunteers were dropped from consideration on this basis. The length of the drug-free period preceding the laboratory sleep recordings varied from subject to subject. However, with very rare exceptions, it was not less than 1 week and was typically (in over 80% of the group) more than 2 weeks.

The subjects in this study included 59 women aged 18 to 65 years (mean=47.9; SD=10.8) and 63 men aged 19 to 68 years (mean=45.7; SD=12.4).

METHOD

The subjects were studied over a 5-year period under several clinical protocols. Typically, they either had several consecutive nights of recording as part of a routine clinical diagnostic evaluation, or they participated in a study involving evaluation of efficacy of hypnotic medication, which always included a series of nondrug (placebo) nights before the active compound was administered.

Regardless of the protocol, certain standard sleep recording procedures were observed in every case. All subjects were recorded in individual darkened sound-attenuated bedrooms at times that approximated their habitual sleeping hours. The recordings always included monopolar EEG (recorded from a standard central placement), eye movements (electro-oculogram), and chin electromyogram. Thus, although certain subjective and preliminary questionnaire data are missing for several subjects, comparable sleep recording data were obtained in every case. Each subject had at least 2 consecutive all-night sleep recordings, the first of which was considered adaptation and excluded from the analyses. (In 25 cases, the first 2 nights were considered adaptation and were not analyzed.) For the most part, subjects were permitted to sleep until they awakened spontaneously, although on approximately 20% of the nights the recording was terminated before spontaneous arousal so that subjects could get to work on time.

A total of 368 all-night sleep recordings were analyzed for this study. The number of consecutive post-adaptation all-night recordings ranged from 1 (in 49 subjects) to 13 (in 2 subjects). All sleep recordings were scored in 30-second epochs according to the criteria of Rechtschaffen and Kales (39).

Subjective data were gathered in two forms. First, most subjects received a prerecording interview that detailed areas of complaint. Second, sleep questionnaires were given before access to clocks on the mornings after the all-night sleep recordings to assess the previous night's sleep. Sleep recording data and sleep questionnaire information were averaged for each subject across the postadaptation laboratory nights.

RESULTS

Complaint Background

The history of complaints of insomnia for the 40 women on whom data were available ranged from 6 months to 33 years (mean=13.1 years). The complaints of 43 men had been present from 3 to "more than 25" years (estimated mean=8.5 years). Complaints regarding nightly sleep time were similar for women and men. Mean sleep time per night for 51 women was 297.0 minutes and for 50 men was 306.1 minutes. Also similar were the habitual sleep latencies reported in the histories for women and men, with a mean sleep latency of 62.2 minutes for 51 women and 60.2 minutes for 38 men.

When 41 of the women were asked if they ever took daytime naps, 24 said they never napped, 13 said they napped less than once a week, and 4 said more than once a week. Of 32 men asked about napping, 12 reported that they never took naps, 16 said they took less than one nap a week, and 4 said they napped more often than once a week.

Sleep Data

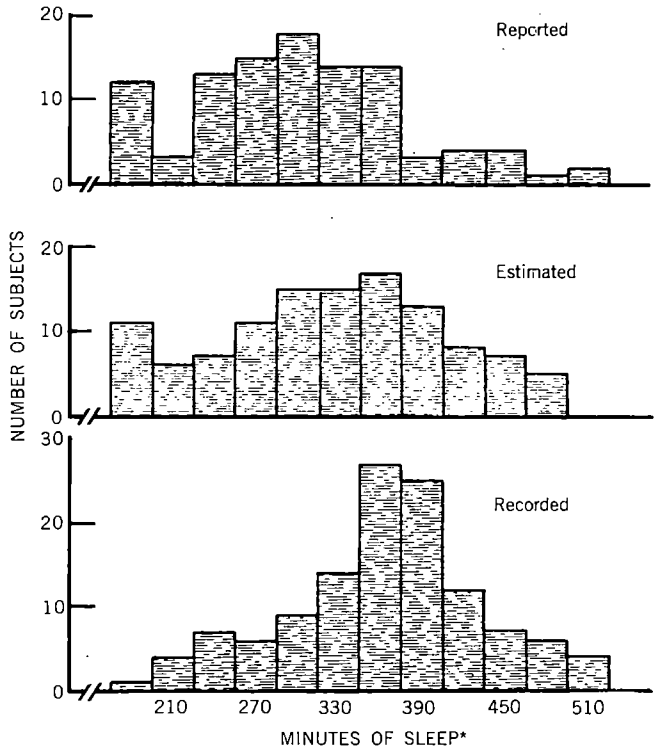
Two major complaint areas are usually assessed in patients who complain of insomnia—sleep induction and sleep maintenance. For this report these areas were evaluated using total sleep time, sleep latency, and number of arousals. These variables were chosen because they were accessible from both objective recordings and subjective reports. Two-way, age-by-sex analysis of variance was performed on each of the variables, and Spearman rank order correlation coefficients (ρ) were computed among the variables for women and for men. Significant results are reported when appropriate.

Total sleep time. Objectively recorded total sleep time showed a significant sex difference ($F=5.44$, $df=1, 112$; $p<.05$; mean for women=375.1 minutes, for men=392.2 minutes). No significant changes were seen with age. Variability among subjects was high; the range of total sleep time in the 122 subjects was 98.7 minutes to 528.6 minutes.

Subjective estimates of sleep time on the mornings after the recordings usually averaged well below the objective values. Overall, there was a significant difference ($p<.001$, t test for correlated means) between the average recorded total sleep time of 375.0 minutes and the average estimated total sleep time of 332.8 minutes. Nevertheless, there were 21 subjects whose estimates were consistently within 15 minutes of the actual total sleep time and 15 subjects who overestimated total sleep time by more than 15 minutes. Total sleep time was consistently underestimated by a margin of greater than 60 minutes a night by 42 subjects. A significant correlation between the recorded total sleep time and the estimated total sleep time was found in both women ($\rho=.40$, $p<.001$) and men ($\rho=.45$, $p<.001$).

For the subjects whose interview data were available, the correlation between the recorded total sleep time and the interview estimate of habitual sleep time was significant only in men ($\rho=37$, $p<.01$).

FIGURE 1
Comparison of Average Sleep Times of Subjects with Insomnia Complaints Reported in Prerecording Interview (N=101), Estimated After Sleeping in Laboratory (N=115), and Recorded in Laboratory (N=122)



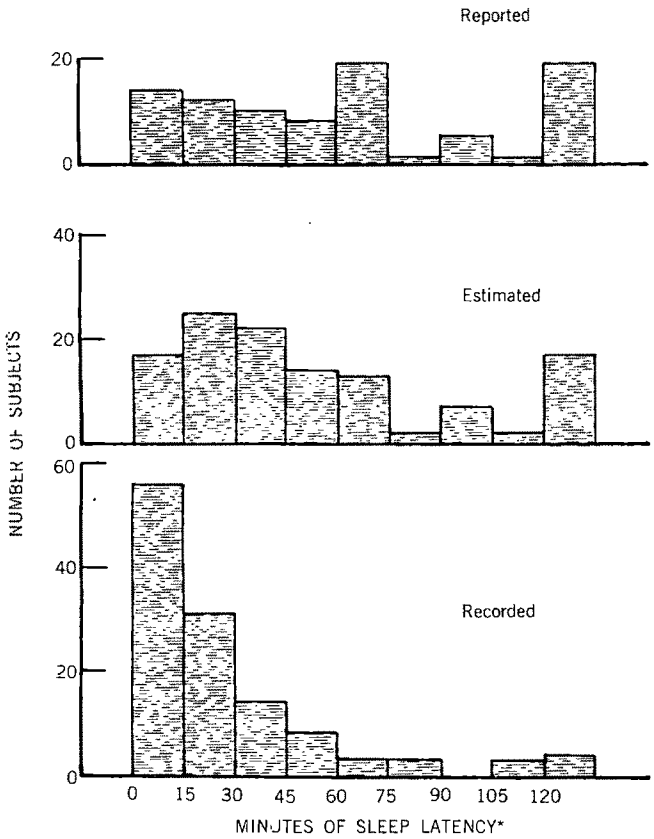
*Each bar represents an interval of 30 minutes (minimum values for each range age given), with the exception of the first bar, which represents all values lower than 210 minutes.

Figure 1 presents a comparison of the frequency distributions of sleep time in terms of the initial self-report at the prerecording interview, the average estimated total sleep time in the laboratory, and the average sleep time on the postadaptation laboratory sleep recordings. From this figure it is apparent that the complaints about sleep time at home were distributed in a lower range than were the estimated sleep times in the laboratory. Similarly, a greater number of individuals estimated less sleep time in the laboratory than was actually recorded.

Sleep latency. For this study the objective measure of sleep latency was defined as the elapsed time from turning out the lights until the appearance in the sleep record of three consecutive 30-second epochs of NREM stage 1 sleep or the first epoch of NREM stage 2 sleep.

Sleep latency showed great variability among subjects: the shortest average sleep latency was 0.7 minutes, and the longest was 251.7 minutes. No significant age or sex differences were discernible by analysis of

FIGURE 2
Comparison of Average Sleep Latencies of Subjects with Insomnia Complaints Reported in Prerecording Interview (N=89), Estimated After Sleeping in Laboratory (N=119), and Recorded in Laboratory (N=122)



*Each bar represents an interval of 15 minutes, with the exception of the last bar, which represents all values of 120 minutes or more.

variance, and no significant correlation with age was found in either women or men.

In general, the estimated sleep latencies were higher than the recorded sleep latencies. Overall, there was a significant ($p<.01$, t test for correlated means) difference between the average recorded sleep latency of 26.2 minutes and the average estimated sleep latency of 61.7 minutes. However, 54 subjects were able to estimate sleep latency within 15 minutes of the recorded value, and 5 subjects underestimated sleep latency by a margin greater than 15 minutes. Sleep latency was consistently overestimated by more than 15 minutes in 60 subjects and by more than 1 hour in 15 of these subjects. Significant correlation was found between recorded and estimated sleep latency in women ($\rho=.64$, $p<.001$) and in men ($\rho=.60$, $p<.001$). In the 89 subjects who had reported habitual sleep latency in the prerecording interview, there was no significant correlation between the average recorded sleep latency and their reports in either women or men.

Figure 2 shows the frequency distributions of sleep latencies obtained from the subjects' initial prerecording reports and from the estimated and actual sleep latencies in the sleep laboratory. It is clear from this figure that the distribution of sleep latencies was concentrated much more in the 0–30-minute range for the recorded sleep latencies than for either of the subjective estimates. The distribution of laboratory estimates was a closer approximation of the actual sleep latency distribution than was that of the prerecording interview reports.

Nocturnal arousals. The number of arousals recorded on the laboratory nights showed a significant difference among age groups ($F=3.73$, $df=4, 112$; $p<.05$; mean values for age, 18–29 years=12.7 arousals, 30–39 years=14.3 arousals, 40–49 years=17.8 arousals, 50–59 years=18.4 arousals, and 60–68 years=25.2 arousals): the older subjects had more frequent arousals than did the younger subjects. Without exception, the subjects consistently underestimated the number of arousals. No significant correlation was found between the recorded and estimated number of arousals in either women or men. No data were available from the prerecording interviews on number of nocturnal arousals.

MMPI Data

The MMPI was administered to 65 of the subjects; 22 of these were clinic patients and 43 were from the group of research subjects. Normal MMPI profiles were found in 27 subjects (42%). (The masculinity-femininity scale was not considered.) Of the subjects who had one or more scales in the pathological range, 25 showed abnormal elevation of the depression scale, and 6 had an elevated hypochondriasis scale. Inspection of the data showed no obvious relationships between MMPI profiles and the subjective or objective sleep variables.

DISCUSSION

The relationship between subjective and objective sleep data has been examined in smaller samples by a number of investigators (11, 18, 32–34, 40–42). We are concerned in our present sample with the extent to which the prerecording complaints and the sleep logs of the morning after predicted the actual sleep.

As was noted earlier, the estimate of sleep time reported in the prerecording interview was correlated with the recorded value only in men, and the estimate of habitual sleep latency reported in the interview was uncorrelated with the recorded values in both men and women. How does this finding relate to how a physician might interpret a patient's sleep complaint? For example, an examination of the data from our 57 subjects who said they usually slept 5 hours or less each night shows that the actual recorded sleep time was under 5 hours in only 10 subjects (17.5%), between 5 and 6 hours in 10 subjects (17.5%), between 6 and 7 hours in 31 subjects (54.4%), and over 7 hours in 6 subjects (10.5%). In the 46 subjects who said they usually took 60 minutes or longer to fall asleep, we found the sleep

latency recorded in the laboratory was over 60 minutes in only 6 subjects (13.0%), between 30 and 60 minutes in 12 subjects (26.1%), between 15 and 30 minutes in 8 subjects (14.4%), and under 15 minutes in 20 subjects (43.5%). From these data it appears that fewer than 1 patient in 5 with a complaint of very short sleep or very long sleep latency will have the complaint confirmed in a laboratory sleep recording.

In terms of the estimates obtained in the questionnaires given in the morning after each recording session, the subjects were able to characterize their sleep more accurately. In both the women and men, the laboratory estimates of sleep time and sleep latency were correlated with the recorded values. Nevertheless, differences between the mean values were high—over 40 minutes for sleep time and approximately 35 minutes for sleep latency—with estimated sleep time significantly lower and estimated sleep latency significantly higher than the recorded values.

The most striking discrepancy between estimates and actual values was found for the number of arousals per night. Every subject consistently underestimated the number of arousals. The sleep processes may have interfered with memory for short arousals, subjects may have perceived numerous short arousals as one or several longer awakenings, or the short arousals may have been perceived as a continuation of unbroken wakefulness at the beginning of the night or an early interruption of sleep at the end of the night. In the men there was a trend for the number of arousals to be inversely correlated with the estimated total sleep time ($\rho=-.27$, $p<.05$), which suggests that subjective emphasis on many brief arousals may have contributed to the underestimations of sleep time.

These data relating subjective estimates to actual sleep recordings in subjects who complained of insomnia indicate that physicians should be very careful when evaluating the complaint. Because the morning-after estimates more closely paralleled the recorded values, one might conclude that people who complain of insomnia are able to describe their sleep with more accuracy on a night-to-night basis than in a more unfocused interview. This suggests that a daily sleep log would be a better way for physicians to evaluate the sleep complaints of these patients.

Comparison with noncomplaining individuals. Investigators have reported on people who complain of insomnia but who apparently obtain "enough" sleep (18, 34). In our present sample we obviously have a number of such individuals. Accordingly, we may even ask whether the sleep of this entire group can be distinguished from the sleep of normal, noncomplaining subjects. At the present time the best summary of normative sleep data is that of Williams and associates (43). In a separate analysis (35), we compared sleep time and sleep latency in 87 of Williams and associates' normal subjects with that of 109 of the subjects reported on here. Overall, the normal sleep times were approximately 30 minutes longer and the sleep latencies approximately 30 minutes shorter. Age and sex interactions were also apparent. Although there were clear differences between the groups on these variables, the values for sleep latency and sleep time overlapped the normal range in many of the subjects with sleep complaints. For example, if one were to compare the 109 subjects who complained of insomnia (35) to age- and sex-matched normal subjects (43), 42 (38.5%) were within one standard deviation of the normal mean for sleep time and 57 (52.3%) for sleep latency. In addition, 12 (11.0%) "insomniacs" were above the range for sleep time and 2 (1.8%) were below the range for sleep latency. Thus it appears that approximately half of the subjects who complained of insomnia could not be distinguished from normal subjects by total sleep time or sleep latency.

In an unpublished study we also compared our subjects with Williams and associates' normal subjects for the number of arousals per night. The number of arousals was higher in the subjects who complained of insomnia in all age and sex groups. Individually, 101 of the 109 subjects (92.7%) were above one standard deviation over the normal age and sex group means for this variable.

It is possible that the arousals in these subjects are due to some underlying disturbance that may be identified by sleep recordings. When standard sleep recording procedures have been expanded to include measures of respiration and leg movements it has been found that in certain patients with complaints of chronic insomnia, respiratory pauses (32) or leg movements (38) were associated with nocturnal arousals. In both of these syndromes the disturbance (apnea or leg movements) was completely unknown to the patients until revealed by laboratory sleep recordings. Whether or not these patients should have been excluded from this report remains open to question. Solely on the basis of complaint, there was no reason to exclude them because they were virtually indistinguishable from the 122 subjects reported on here. Parenthetically, objective data show that total nightly sleep times in sleep apnea and nocturnal myoclonus patients are generally somewhat lower than data for the subjects in this report. It also seems clear that similar subgroupings may exist within the 122 subjects, although they are as yet undifferentiated.

What determines the complaint of insomnia? Very few of the subjects in our sample had spectacularly low sleep times, and only 27 averaged less than 5.5 hours per night. Studies involving restricted sleep in normal subjects (44, 45) have shown that reduction of sleep to 5.5 hours a night, even for prolonged periods, does not severely affect mood or performance. Thus one would not expect that sleep loss by itself would lead to the complaints of fatigue, sleepiness, irritability, and impaired performance commonly reported by insomniac patients. The reason such complaints are associated with insomnia and not with being normal but on a restricted sleep schedule may stem from differences in how the sleep loss occurs. That is, normal sub-

jects simply restrict their time in bed, but insomniac patients have striking elevations in the number of arousals. Thus one might speculate that the impairment of daytime activities in people who complain of insomnia is not a result of sleep loss per se but is due to chronic interruptions of sleep. Indeed, in summarizing the relationship of sleep stages to waking behavior, Johnson (46) concluded that "during sleep, the disruption of the REM-NREM cycle may be more relevant to waking behavior than the total amount of wakefulness or time spent in specific sleep stages."

Psychological factors. The MMPI data for our subjects are somewhat different from those obtained by other researchers of insomniac patients (47, 48). We found abnormal profiles in only 58% of our subjects; Kales and Kales (47) found abnormal elevations in 85% and Roth and Kramer (48) in 88% of their patients. In our subjects who had abnormal MMPIs, we found, as did Roth and Kramer, that the neurotic tetrad of depression, hypochondriasis, and hysteria comprised the greatest proportion of abnormal values. It is not clear at the present time why the MMPI results were different in our subjects. Preliminary evaluation, however, showed no relationship between MMPI data and recorded or estimated sleep values.

Psychological evaluation of patients who complain of insomnia is unquestionably important and should be pursued. At the present time, however, we cannot say that chronic insomnia invariably causes depression, anxiety, or other psychological symptoms or that these psychological disturbances cause the complaint of chronic insomnia. At best, we can say that in certain patients psychological disturbance and the complaint of insomnia coexist. Clarifying the relationships of both psychological and physiological disturbances to the complaint of insomnia will be vital in advancing our understanding of this ubiquitous complaint.

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The Treatment of Pathological Panic States with Propranolol

BY JON F. HEISER, M.D., AND DON DEFRANCISCO, M.D.

The authors report on the effects of propranolol, a beta-adrenergic blocking agent, on 10 patients with pathological panic states. Propranolol was effective in treating acute pathological panic, but modest doses of the drug administered for brief periods of time did not alleviate chronic panic attacks associated with agoraphobia. The drug suppressed panic associated with depressive syndromes but did not affect the depression and had no clear effect on anticipatory anxiety. The authors suggest that further study of these findings may clarify other clinical problems.

PANIC IS A NORMAL, innate reaction pattern. The adaptive purpose of panic is to promote escape or rapid dispersal. Panic behavior is asocial, and the escape or dispersal may be uncharacteristic, irresponsible, and potentially violent in an impersonal way. The deepest psychobiological and social relationships can be suspended in panic-stricken people: mothers may abandon their infants, soldiers may desert their assignments and buddies, and people may trample relatives and strangers alike. These dramatic and unique features suggest that panic is qualitatively as well as quantitatively different from other forms of fear and anxiety (1). Panic behavior may be maladaptive when rapid dispersal is inhibited or when the stimulus that elicits panic behavior seems inadequate. What happened during the famous Cocoanut Grove fire that took the lives of 491 people in Boston, Mass., in November 1942 is an example of blocked dispersal familiar to behavioral scientists (1, 2). Front-page news stories provide numerous other examples daily.

This paper is concerned only with situations in which the stimulus that evokes panic behavior seems inadequate, i.e., pathological panic states. Modern study of pathological panic states probably began in 1870, when Benedikt termed the condition *platzschwindel* (3). However, with rare exceptions, such as studies of agoraphobia and homosexual panic (3; 4, pp. 1788–1789), the concept of panic, normal or otherwise, has received little attention in psychiatry and psychology.

Interest in the diagnosis and treatment of pathological panic attacks or panic anxiety has increased recently. Preliminary drafts of the proposed third edition of APA's *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* will probably include a new category, "panic disorder" (5). The increased interest in panic is in large part due to studies that have refined from phobic states a phobic anxiety syndrome with panic attacks (6–10). Klein and associates (8–10) found that tricyclic antidepressants blocked panic attacks (subjective panic accompanied by massive sympathetic and parasympathetic nervous system discharge and considered by these authors the hallmark of the phobic anxiety syndrome) but did not affect anticipatory anxiety (a qualitatively different and less intense anxiety that is generally not associated with more than moderate sympathetic activity but is often associated with elaborate patterns of avoidance and other phobic behaviors). Neither major nor minor tranquilizers are effective in treating panic attacks, but either may decrease anticipatory anxiety (8–10).

The tricyclic antidepressants frequently block panic attacks within hours of the initiation of therapy, in sharp distinction to the 1–3-week delay that patients with retarded (but not agitated) depression often experience before responding to tricyclic antidepressants. Klein and Davis (8) stated that patients with the phobic anxiety syndrome suffer primarily from cardiorespiratory symptoms. Several years ago Lowenstein (11) noted that propranolol was effective in treating agoraphobic patients. He stated that beta blocking agents "reduce to some extent the somatic symptoms of anxiety . . . and often to a marked degree those, e.g., tachycardia and palpitations, related to respiratory alkalosis." Aware that tricyclics may be, among other things, beta blockers (12, 13), we hypothesized that beta-adrenergic blockade was the mechanism by which the tricyclics are effective in the phobic anxiety syndrome.

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CASE REPORTS

Results of clinical experience treating 10 patients with propranolol are summarized in table 1. Informed consent was obtained from all of the patients after the nature of all procedures involved in the study was fully explained.[1] Symptom patterns shown by the patients were grouped into four classifications: acute panic attacks with agoraphobia, anxiety states without panic attacks, chronic pain attacks, and depression with panic attacks or severe agitation.

Acute Panic Attacks

Patients with panic states of recent onset obtained immediate beneficial results when given propranolol.

Case 1. This 26-year-old man with three children complained of severe panic that had been occurring sporadically for the preceding 6 months. Each attack lasted several days to 2 weeks and was accompanied by palpitations, weakness, dizziness, a feeling of suffocation, and a fear of dying. He had had similar anxiety attacks in high school. Three years before we saw him he had experienced increasingly severe panic attacks during all of his flights in the Navy and had received a medical discharge because of "flying phobia."

Results of an exhaustive medical evaluation were normal, and 10 mg of diazepam 3 times a day gave no relief. Thirty-six hours after the onset of a panic attack, 10 mg of propranolol was given orally. The patient's symptoms abated within an hour. On a dosage of 10 mg of propranolol 3 times a day his panic states recurred shortly before each dose. Gradually increasing each dose to 20 mg was accompanied by a complete remission. The patient has subsequently experienced no anxiety attacks and has taken his first plane rides since his discharge from the Navy, including a round-trip coast-to-coast flight. He has continued in psychotherapy and has recently been in marital therapy, partly because of what has been interpreted as his wife's difficulty in accepting his decreasing dependency.

Chronic Panic Attacks with Agoraphobia

Patients with chronic phobic anxiety syndromes or agoraphobia received no benefit from brief trials with small doses of propranolol. Two patients immediately developed a phobia to propranolol and discontinued it. One had a dramatic positive response to imipramine. Our prediction that all patients with pathological panic states would be improved when treated with propranolol was therefore not supported.

Case 4. This 27-year-old divorced man was referred because of severe agoraphobia that had slowly progressed over a 5-year period to the point where he was almost completely homebound. Until the unexplained onset of his phobic condition he had been an excellent student and a successful representative for his union in a large aerospace corporation. He now lived alone, had no friends, and was frequently overcome with panic the few times he ventured outside (only when absolutely necessary). His panic attacks were inconsistent and unpredictable and could occur at home. During the attacks he felt palpitations, weakness, dizziness, and a sensation of suffocating. His chronic obsession about dying became a terrifying fear that he would die in the next moment of a heart attack. He twice became addicted to sedatives in attempts at self-medication.

The patient was terrified of the 30- to 40-minute drive to our clinic; he stopped every few blocks to collect himself. He therefore showed up several hours late for his first two appointments and was not seen by the physician. In the habit of taking his pulse frequently, he became extremely concerned after his initial dose of 10 mg of propranolol (prescribed 3 times a day) when he observed that his pulse decreased from 72 to 65 beats a minute. He became more concerned when his heart rate did not abruptly increase following this observation. Caught in a vicious cycle, he became terrified and came to a medical emergency room by ambulance. His pulse still remained normal. After this he considered 5 mg of propranolol a day intolerable because of the changes he noted in his heart rate.

He was given a prescription for 25 mg of imipramine 4 times a day, but, extremely phobic of medication at this point, he took none for 2 weeks. When he finally and reluctantly tried imipramine he felt vastly improved within 24 hours. He discovered himself spontaneously whistling and felt a general sense of well-being for the first time in 5 years. Within a few days he felt free to leave his house as he pleased. With reassurance he became involved in group therapy and began looking for a job.

Anxiety States Without Panic Attacks

Preliminary experience suggests that propranolol provides good results only in patients who have the subjective experience of panic or extreme terror. Free-floating anxiety, depression, and other affects are not altered by the drug.

Depression with Panic Attacks

Treatment with propranolol was associated with elimination of agitation and panic states associated with various types of depression without altering depressive affect or other symptoms of the depressive syndromes.

DISCUSSION

Range of Effectiveness

Although intermittently recommended as psychopharmacological agents for a decade, beta-adrenergic blocking agents have been sparsely evaluated and seen to have only sporadic success in treating various anxiety syndromes. Occasionally they have proven more effective than placebo, particularly in patients with somatic signs of anxiety. They are not generally more effective than minor tranquilizers (17–26). Reports of effective treatment of psychoses (27), alcoholic withdrawal (28), heroin antagonism (29), or other psychiatric conditions (30) with propranolol have not been widely confirmed and remain controversial (31, 32). Jefferson (33) reviewed the status of beta-adrenergic blocking agents in psychiatry in 1974.

The varied response of some psychiatric and medical conditions to beta-adrenergic blockers may be ex-

[1]Propranolol has not been approved by the Food and Drug Administration for the treatment of any psychiatric illness.

TABLE 1
Summary of Case Reports of 10 Patients Treated with Propranolol

Item	Age (years)	Sex	Marital Status	Chief Complaint	Diagnosis	Previous Medications	Current Medications
Group 1: acute panic attacks							
Case 1	26	Male	Married	Severe panic for 6 months	Phobic neurosis (phobic character)	No response to diazepam	No panic after 20 mg of propranolol 3 times a day started
Case 2	26	Male	Married	Severe panic for 6 months	Anxiety neurosis	No response to diazepam	No panic after 10 mg of propranolol 4 times a day started
Case 3	24	Female	Separated	Tachycardia and depersonalization of recent onset	Anxiety neurosis	Unknown	No panic after 10 mg of propranolol 2 times a day started
Group 2: chronic panic attacks with agoraphobia							
Case 4	27	Male	Divorced	Progressive agoraphobia with panic attacks for 5 years	Phobic neurosis (agoraphobia)	Addicted to sedatives twice	Phobic response to first dose of 10 mg of propranolol 3 times a day; prompt and complete remission with imipramine
Case 5	44	Female	Married	Progressive agoraphobia with panic attacks for 17 years	Phobic neurosis (agoraphobia)	Modest temporary improvement, worsening, or no response with various medications	Phobic response to 10 mg of propranolol 3 times a day for 2 days; further treatment rejected by patient
Case 6	39	Female	Married	Progressive agoraphobia with panic attacks for 7 years	Phobic neurosis (agoraphobia)	Modest improvement with hormone injections, diphenylhydantoin, and diazepam	No benefit but side effects with 2-week trials of 20 mg of propranolol 4 times a day, imipramine, propantheline, and phenelzine; temporary remission with regressive ECT
Group 3: anxiety states without panic attacks							
Case 7	21	Male	Single	Feeling weird and feeling mind blank	Anxiety neurosis	None recorded; possible untoward reaction to LSD	No benefit from brief trials of 10 mg of propranolol 4 times a day, thiothixene, doxepin, and amitriptyline; euphoria during sodium amytal interview; improvement with diazepam
Group 4: depression with panic attacks or severe agitation							
Case 8	48	Male	Married	Hyperventilation syndrome with panic attacks and phobias	Involutional melancholia	Modest improvement with propranolol and diazepam prescribed by internist	10 mg of propranolol 3–4 times a day blocked panic attacks but left affect and vegetative signs of depression untouched; severe weakness with 25 mg of amitriptyline 3 times a day; modest improvement with a maximum dose of 20 mg of doxepin a day

TABLE 1 (continued)
Summary of Case Reports of 10 Patients Treated with Propranolol

Item	Age (years)	Sex	Marital Status	Chief Complaint	Diagnosis	Previous Medications	Current Medications
Group 4							
Case 9	56	Female	Married	Recurrent psychotic depression	Involutional melancholia or recurrent psychotic depression	Fair response to combination of phenothiazine and tricyclic antidepressant	Agitation and tremors responded to 10 mg of propranolol 3 times a day; depression responded to thioridazine and imipramine; severe depression no longer occurred with lithium and occasional imipramine*
Case 10	30	Male	Single	Severe suicide attempts because of chronic severe depression and "flushing attacks" accompanied by weakness, dizziness, rage, and a vague anxiety	Psychotic depressive reaction, recurrent psychotic depression, melancholic personality, or anaclitic depression	Unknown	"Flushing attacks" stopped with 20 mg of propranolol 3 times a day; depression not affected by propranolol; depression improved and flushing diminished with imipramine and occasional thioridazine; patient committed suicide after discharge from another hospital**

*Whether the agitation and tremor were primary symptoms of this patient's depression or side effects of amitriptyline or thioridazine is not certain. Pitts (14) used propranolol to combat tricyclic-antidepressant-induced tremor and considered tricyclic antidepressants beta-adrenergic activators.
**The subjective affect of this patient's "flushing attacks" was composed of rage and a vague anxiety, not panic. Treatment with an alpha-adrenergic blocking agent might be effective in such cases (15, 16).

plained if a distinction is made between panic states, which seem to be promptly blocked by propranolol, tricyclic antidepressants, and monamine oxidase (MAO) inhibitors (34, 35), and other types of anxiety, which do not respond consistently or dramatically to propranolol. Chronic episodes of panic and agoraphobia may represent gradual developments and/or end stages of acute panic attacks or may be clinically distinct entities.

No one has explained why reactive or neurotic depressions, which appear clinically distinct from endogenous or psychotic depressions, may respond, albeit sporadically, to tricyclic antidepressants. At least some reactive depressions may respond to beta-adrenergic blockade when symptoms are exacerbated by an underlying panic state (36). This may also help explain the prompt response of patients with agitated depression to antidepressants and/or phenothiazines (8).

Whether patients who consult cardiologists because they have various forms of the hyperdynamic heart syndrome (37) or neurologists because of familial, senile, or essential tremors (38, 39) are different from patients complaining to psychiatrists of panic attacks is unknown. Frohlich and associates (37) found that during an infusion test with the beta-adrenergic stimulating agent isoproterenol 9 of 14 patients with a "hyperdynamic beta-adrenergic circulatory state" displayed "an hysterical outburst, almost uncontrollable" that was promptly reversed by intravenous propranolol but not by placebo. Conversely, anxious individuals with normal or slightly increased heart rates before isoproterenol had a normal heart-rate response to infusion of isoproterenol and did not exhibit dramatic emotional outbursts.

Propranolol is used in the treatment of cardiac arrhythmias, hyperthyroidism, hypertropic aortic stenosis, and angina pectoris. It is also used with alpha-adrenergic receptor blocking agents in preparing patients with pheochromocytoma for surgery (40, 41). Although not approved for such use by the Food and Drug Administration, propranolol has also been used for hypertension, hyperthyroid crises, migraine headaches, and certain neurological tremors (38, 39, 42, 43). It has been reported (44) that the tricyclic antidepressant amitriptyline was effective in preventing severe migraine headaches, apparently independent of an antidepressant effect.

Thirty years ago Ficarra and Nelson (45) reported that phobias may be the presenting complaint in patients with hyperthyroidism. The differential diagnosis of patients with acute panic attacks, agoraphobia, and lesser forms of fear and anxiety must include these conditions and other organic dysfunctions such as paroxysmal atrial tachycardia. It is important to determine whether such patients have a specific physiological disorder that should be treated rather than just receive medication to control their symptoms.

The long-term psychological impact of blocking a homeostatic response is unknown. Our preliminary experience and literature review suggest substantial changes only in persons with pathological panic attacks that serve no apparent vital or useful function. We have no example of the reaction of a propranolol-treated patient in a situation in which panic (with escape or rapid dispersal) might be adaptive.

Mechanism of Action

The mechanism of action of propranolol in treating psychiatric symptoms is also unknown. Propranolol might act through the central or peripheral nervous systems. Propranolol has pharmacological effects other than beta-adrenergic blockade, including membrane-stabilizing activity (quinidine-like or local anesthetic action) with large doses and a sedative and anticonvulsant effect on the central nervous system that is apparently unrelated to beta-adrenergic blockade. It has almost no beta-adrenergic activating effects, although some are present in other beta-adrenergic blockers such as practolol. Any combination of these properties and placebo effects could have affected our patients. Whether propranolol relieves mental and physical suffering or merely reduces somatic manifestations of agitation and anxiety is unknown.

A fortuitous combination of beta-adrenergic blockade (or stimulation), alpha-adrenergic blockade, anticholinergic and sedative properties, stimulation of catecholamine- and serotonin-mediated systems, and regulation (rather than blockade or stimulation) of any of these phenomena and other unspecified properties may make the tricyclics effective or more acceptable in the treatment of agoraphobia (46, p. 199; 47, 48).

Tyrer and associates (35) postulated that the favorable response of phobic patients to MAO inhibitors is unlikely to be due to their antidepressant effect because in their studies care was taken to exclude depressed patients and improvement correlated negatively with the initial depression rating. The mechanism of action of MAO inhibitors against phobic symptoms is unknown, but MAO inhibitors also block the autonomic nervous system (48).

Pharmacokinetics

The optimal dose range, the duration of treatment, and the long-term effects of propranolol when used for psychiatric conditions are not known. Klein's group (8–10) stressed the pattern of exacerbation and remission of the phobic anxiety syndrome and suggested that intermittent therapy may suffice or be preferable. Suzman (21) reported anxiety-relieving responses to as little as 40 mg of propranolol a day. Most of his patients responded to 160 mg a day, but some required 320 mg a day temporarily. Many patients were followed between several months and 6 years without evidence of untoward reactions. Gardos and associates (31) found that effective beta-adrenergic blockade occurred at doses of 180 mg a day, and increasing doses did not increase blockade. In treating schizophrenic and manic-depressive patients, Atsmon and associates (27) reported beneficial effects from daily doses of 1000 to 5000 mg of propranolol. These large doses and ranges suggest the possibility of different mechanisms or sites of action.

Shand and associates (49) reported that peak plasma levels in 5 subjects varied sevenfold following oral administration of propranolol. Plasma levels after intravenous administration in the same subjects varied twofold. Plasma levels were relatively constant when subjects were given the same dose more than once. Plasma levels reached a maximum 1½ to 2 hours after an oral dose was taken while the subject was fasting and after 2 to 4 hours when the dose was taken with a meal. The plasma half-life was 3.2 hours when taken orally and 2.3 hours after intravenous administration.

Future Prospects

As already noted, propranolol has not been approved by the Food and Drug Administration for the treatment of any psychiatric disorder. Although we do not recommend general application of our findings at this time, further studies may clarify the clinical applications and the mechanism of action of propranolol. Such studies should point toward the classification, etiology, natural history, pathophysiology, and clinical psychopharmacology of pathological panic states, the phobic anxiety syndrome, agoraphobia, the hyperventilation syndrome, homosexual panic, psychocardiac disorders, some types of affective disorders, pseudoneurotic and latent schizophrenia, borderline syndromes and personality disorders (3–11, 17–39, 43, 44, 50, 51). Studies also need to be made of the relationships of these traditionally psychiatric conditions to such medical conditions as the hyperdynamic heart syndrome, migraine headaches, and familial, senile, or essential tremors. Adding terms such as "pathological panic state" or "pathological extreme terror state" and qualifying them as propranolol sensitive or propranolol resistant may prove useful to work in this area.

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Delinquency, Psychomotor Epileptic Symptoms, and Paranoid Ideation: A Triad

BY DOROTHY OTNOW LEWIS, M.D.

In a retrospective chart-review study, the author found psychomotor epileptic symptoms in 6% (N=18) of children referred to a juvenile court over a 2-year period. Abnormalities appeared in 11 of the 14 available EEGs, but temporal lobe foci were noted in only 3 cases. Of these 18 children, 16 experienced paranoid symptoms that led to aggressive behavior. The incidence of offenses against persons was 50% in this sample, compared to 2–3% in the population of children referred to the juvenile court. The author suggests that psychomotor epilepsy may be far more common among delinquent children than has been reported previously and should therefore be included in the differential diagnosis of court-referred children.

THE PURPOSE of this paper is to report a high prevalence of psychomotor epileptic symptoms coupled with paranoid ideation and behavior in a group of children referred to a child psychiatry clinic in a juvenile court setting. (I have deliberately used the term "symptoms" because discrete abnormal EEG foci were not always documented.) I will also discuss the central nervous system dysfunction of these children in relation to birth histories, medical histories, EEG findings, and the nature of the offenses that brought them to the court's attention.

As Ervin has pointed out, "No doubt there exist as many definitions of epilepsy as there are neurologists and as many types of epilepsy as there are patients" (1, p. 1138). Nevertheless, there is some consensus regarding the symptomatology of so-called "psychomotor-temporal lobe" seizure states (2–4). The criteria I have used for psychomotor epileptic symptoms are similar to those of Rutter and associates (5). Each child demonstrated or had a clear history of at least four of the following symptoms: auras of anxiety or fear, a variety of visceral symptoms, alterations in consciousness (usually without complete loss of consciousness), complex thought processes and feeling states, automatic behaviors, and auditory, visual, and sensory hallucinations. There was partial amnesia for the manifestations of the seizure states, but the total amnesia so characteristic of grand mal epilepsy was not always present. In many cases there was a complex interplay of physiologically and psychologically or environmentally induced behaviors that sometimes made it difficult to tell that a seizure was in progress or had taken place.

Although symptoms were associated with discrete temporal lobe EEG foci of abnormality in some children, they also occurred in children with normal or diffusely abnormal EEGs. The EEGs of children suffering from psychomotor epilepsy often demonstrate diffuse abnormalities (5). Glaser and Dixon (6) have pointed out that discrete temporal lobe foci of abnormal electrical discharge are more characteristic of adult psychomotor epileptics than juvenile psychomotor epileptics and that "focal temporal spikes are relatively infrequent (10%) and are elicited in only slightly higher incidence in sleep." Consequently the EEG was not a major criterion for the diagnosis. That normal encephalograms are sometimes found in psychomotor epilepsy may be attributed to the fact that EEGs are often obtained between actual seizures or that the seizure focus is deep in the brain, within the limbic system, and therefore inaccessible to ordinary EEG techniques (7). Although there have been investigations of psychomotor epileptic symptoms in neurological patients, psychiatric patients, and prisoners, little work has been done on the prevalence and characteristics of the disorder in delinquents.

This study consisted of a retrospective review of the charts of every child with psychomotor epileptic symptoms referred to a juvenile court clinic over a two-year period. Data were gleaned from psychiatric, psychological, medical, and (when available) EEG records.

CLINICAL FINDINGS

Of 285 children referred to the clinic during the two-year study period, 18 (6%) either described or demonstrated in the course of interviews symptoms consistent with a diagnosis of psychomotor epilepsy. This prevalence is many times that of all forms of epilepsy, which has been estimated to occur in .3–.4% of the population. Psychomotor epilepsy is thought to be between a third and a sixth as common as grand mal epilepsy (1, 2, 8). Thus, the finding that 6% of the clinic-referred delinquents manifested psychomotor epileptic symptoms is noteworthy.

Episodes of loss of fully conscious contact with real-

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ity were characteristic of all 18 children. These altered states of consciousness lasted from several seconds to several hours and occasionally occurred during psychiatric interviewing, medical examination, or psychological testing. In many cases this symptom took the form of "blackouts," long staring episodes, or falling. In several cases the behavior was complex and seemingly purposeful, as was true of 3 children who wandered away from their homes. Two were found wandering the streets, oblivious to their surroundings, and the third came to her senses after wandering through a park, walking across a shallow pond, and winding up in an unfamiliar part of town without knowing how she got there.

It was often difficult to assess the timing of certain behaviors in relationship to seizures and to know which behaviors were auras, which occurred during a seizure, and which occurred following a seizure. One child described "a funny feeling something is going to happen" just prior to episodes of loss of awareness. Others gave histories of dizziness, nausea, and visual distortions that could not always be related temporally to subsequent documented seizures. Only 4 children had histories of the automatisms often associated with psychomotor seizures. Two had histories of lip smacking or mouth movements, and 2 had histories of more complicated but nevertheless stereotyped behaviors during which they were not conscious of their surroundings and could not understand what was said to them. Four children experienced frequent episodes of déjà-vu. Many of the children tried to explain their experiences to themselves; one child concluded, "I must have ESP."

Eight children complained of frequent severe headaches, and 7 reported dizziness and/or nausea that sometimes accompanied the headaches. One child commented, "It feels so bad I throw up."

Nine children had experienced hallucinations: 4 reported visual hallucinations only, 2 auditory hallucinations only, and 3 both auditory and visual hallucinations. One child with visual hallucinations also reported feeling the house tilt. Usually the hallucinations had a neutral quality; 4 children said they frequently heard their names called or heard voices in another room. However, 2 children experienced extremely threatening, frightening auditory hallucinations; 1 girl heard a voice say, "I'll kick her butt," and a boy heard the words, "Get him!"

It was of special interest to find that 16 of these 18 children also experienced paranoid symptomatology in the form of delusions. These delusions ranged from feeling whispered about and picked on or persecuted by friends and teachers to a child's conviction that he/she was being stalked by a murderer. Several children described feelings of being about to be attacked. "I try to hurt someone before they hurt me," a young man explained. Five children frequently carried weapons. One boy explained that he "had to get them before they get me." Four other children had histories of picking up heavy objects such as wrenches and chairs and flinging them at others without observable provocation. Thus most of the children with psychomotor epileptic symptoms had actually behaved aggressively in response to feelings of being threatened or attacked.

One of the most frequent manifestations of aggressiveness was frequent fighting at school in response to imagined threats. Teachers had observed these children lashing out at other children with no apparent provocation and then, with conviction, accusing the other children of starting the conflict. Some children were aware that they were unable to stop fighting once a fight began. One boy explained, "I can't stop myself. Somebody else takes control." Three children described strong wishes and even attempts to kill playmates or siblings, 2 children had histories of torturing animals, and 2 children actually did kill schoolmates.

ELECTROENCEPHALOGRAPHIC FINDINGS

Information from waking EEGs was available or obtainable in 14 of the 18 cases. In the 4 other cases circumstances made it impossible to obtain EEGs. Furthermore, although it would have been desirable to obtain sleep EEGs, the special staffing required for this kind of procedure was rarely available in the court setting. It was also not possible to obtain nasopharyngeal leads. Of the 14 EEG reports available, 11 indicated an abnormality or a possible abnormality, but a temporal lobe focus was evident in only a few cases—only 3 of the 11 abnormal reports mentioned focal temporal lobe abnormalities. One report mentioned an abnormal rhythm in the right anterior temporal lobe, 1 a focus of slow-wave activity in the left temporal lobe as well as generalized slowing, and 1, slowing in both temporal areas, more prominent on the left. Of the 3 children with temporal lobe foci, 2 had violent histories. The most common EEG report was of generalized slowing or nonspecific or diffuse abnormalities. Four reports mentioned occasional sharp waves or bursts in addition to generalized slowing.

MEDICAL HISTORIES

A striking finding was a history of serious trauma to the central nervous system in 15 of the 18 children. Three children had been hit by cars, lost consciousness, and were hospitalized. Seven children had experienced other kinds of serious head trauma, including falling from a tree and being hit in the head with a baseball bat (which necessitated surgery). Two children had had other kinds of seizures earlier in childhood: one had grand mal seizures associated with fevers and another had Jacksonian seizures associated with head trauma. One child had had Guillain-Barré syndrome. One child was reported to have been moribund in infancy from a disease of unknown characteristics.

Six of the 18 children had histories of definite per-

inatal trauma, including prematurity, prolonged labor, maternal hypothyroidism, maternal toxemia, and maternal syphilis. One child was delivered following physical assault on the mother. Six of the children were known to have occasionally used alcohol to excess, but only one was known to have committed a violent act after drinking, thereby conforming to Mark and Ervin's (7) description of "episodic dyscontrol." Only 2 children had perfectly normal perinatal and medical histories; one of them had a strong family history for epilepsy of other kinds. Five of the 18 children had close relatives with known epilepsy.

TYPES OF OFFENSES

A major question is whether the symptoms described bore a special relationship to the kinds of offenses for which a child was referred to court. Children's offenses were classified in terms of severity: minor "status" offenses, such as truancy, running away from home, and incorrigibility; offenses against property, such as theft, breaking and entering, and malicious mischief; and offenses against persons, i.e., assault and murder. Of the 18 children with psychomotor epileptic symptoms, 13 had committed minor offenses, 9 had committed property offenses, and 8 had committed offenses against persons, 2 of which were murders. (Several children in the group had committed more than one kind of offense.) Of note was the finding that offenses against persons were committed by nearly half of the children in this group, whereas offenses against persons constitute only about 2-3% of the offenses for which children are referred to this particular court. Six of the children who were referred ostensibly for "status" or property offenses had actually attacked other individuals in school or at home but were charged with less serious offenses. Thus 14 of the 18 children had histories of seriously aggressive behavior.

DISCUSSION

In this sample of 18 children with psychomotor epileptic symptoms, the disorder was frequently associated with aggressive behaviors and offenses against persons. The literature on psychomotor epilepsy is filled with debate about whether or not this disorder is associated with aggressive acts.

Some authors have stressed the abnormal personalities and/or "interictal states" of individuals who periodically demonstrate the more common symptoms of the seizure itself (3, 4, 9–11). Some papers have called attention to an association of violent or antisocial behaviors with psychomotor epilepsy (6, 9, 12, 13), but others have questioned this relationship (14–18). Wilson and Harris (18) studied 39 psychomotor epileptic children and found aggression and outbursts of anger to be rare phenomena. Loomis (19) failed to find a significant association between EEG abnormalities, specifically temporal lobe abnormalities, and behavior disorders in delinquents. Rodin (14) reported no instance of aggressive behavior during or after induced seizures in epileptics and also found that temporal lobe foci were no more common in aggressive than in nonaggressive epileptics. Gunn and Bonn (16) found no difference in violence between epileptic and nonepileptic prisoners.

On the other hand, Glaser and Dixon (6) found fear and anger associated with severe aggressive behavior in many psychomotor epileptic children. Ounsted (12) also reported an association of episodic aggressive behavior and psychomotor or temporal lobe epilepsy. Serafetinides (13) also found aggressiveness to be especially characteristic when seizures commenced before the age of 10, and Treffert (9) found "assaults, black-outs, and rage episodes" to be more frequent among individuals with temporal lobe epilepsy than psychotic nonepileptic patients.

Much of the disagreement regarding the association of violent behaviors and epilepsy arises from the difficulty involved in ascertaining which behaviors are part of a seizure itself and which occur between obvious seizure episodes. Several investigators have stressed the complex nature of the aggressive behavior of some psychomotor epileptics and have asserted that such behavior could not be part of a seizure or postictal state (15, 20).

In this study, the aggressive behaviors of children with psychomotor epileptic symptoms, while reported to occur occasionally during altered states of consciousness, usually seemed to occur between seizure manifestations and were most frequently committed in response to a child's perceived, or rather misperceived, sense of being threatened. Children with psychomotor epileptic symptoms complained of being picked on, followed, or even assaulted, when to the outside observer this was not the case. Offenses were often associated with these kinds of paranoid feelings. Some so-called "runaways" wandered off at night, feeling pursued by nonexistent enemies. Some children termed "incorrigible" attacked others as a result of misperceptions. One child actually killed another when she mistakenly thought a knife was being pointed at her.

What is the source of these paranoid feelings? Feelings of fear and anxiety are known often to precede psychomotor seizures. Furthermore, psychomotor epileptics often experience what Glaser and associates (4) referred to as "a waxing and waning of alertness and fluctuation in the accuracy of perceptions." Such fluctuating awareness was seen during the course of psychiatric, medical, and psychological evaluations of this sample. Auditory and visual misperceptions also occurred. It is easy to understand how an individual whose world is frequently changing, unpredictable, threatening, and anxiety-provoking might develop paranoid ideation and behavior. Several investigators have mentioned, almost in passing, that psychomotor

epileptics often have, among other symptoms, paranoid ideas as well as hallucinations (4, 9, 20–22). As early as 1951, Gibbs (3) hypothesized that pathophysiological disturbances in the brain lead to disturbances of perception, evaluation, and judgment. Taylor (23) conceptualized the association between aggressiveness and epilepsy as one of impaired learning that at times showed itself in aggressive behavior. Defensiveness might thereby be seen as a reaction to changing, frightening perceptions and misperceptions.

Most of the children in this sample had received serious central nervous system injuries early in life. Following this, they experienced changing states of awareness, episodes of intense anxiety or premonitions of danger, and learning difficulties. It is likely that these factors, over the course of time, contributed to the paranoid outlook of 16 of the 18 children with psychomotor epileptic symptoms. Often a paranoid misperception coupled, perhaps, with impaired impulse control, led to the offenses that brought the children to the attention of the juvenile court. Violence was more common in the psychomotor epileptic children evaluated than in other children referred to court. This violence, however, was rarely thought to be associated with an actual seizure state, but rather with the paranoid outlook the seizure disorder engendered.

The finding of a high prevalence of psychomotor epileptic symptoms coupled with paranoid symptoms in a population of delinquent children suggests that psychomotor epilepsy is probably more common among delinquents than has previously been recognized and that it should be part of the differential diagnosis of court-referred children.

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Effects of Legal Pressure on Prognosis for Treatment of Drug Dependence

BY ROBERT J. HARFORD, PH.D., JAMES C. UNGERER, M.A., AND J. KEVIN KINSELLA, ED.D., M.P.H.

The authors found that four measures of legal pressure were either unrelated or negatively related to retention and outcome in five drug abuse treatment modalities. This suggests that nonvolunteer clients are likely to be insufficiently motivated to benefit fully from treatment and their presence may adversely affect staff morale and prognosis of volunteer clients. The authors recommend that legal pressure not be used as a basis for assigning applicants to treatment modalities and suggest that treatment outcome might be improved by procedures that 1) deal clinically with motivational differences between volunteers and nonvolunteers, 2) establish stricter motivational criteria for admitting nonvolunteers, or 3) encourage enforcement of existing sanctions against violations of stipulations to treatment.

THE RELATIONSHIP between drug abuse treatment agencies and the criminal justice system has been the subject of much discussion and of several articles in the drug abuse treatment literature. These reports, buttressed by a wealth of anecdotal evidence, have supported three related beliefs that have been cited to promote cooperation between treatment personnel and law enforcement authorities.

The first of these beliefs is that arrest and vigorous prosecution of persons who use illegal drugs prevent the spread of drug abuse. According to this hypothesis, enforcement of legal restrictions against unprescribed drug use is the most potent form of primary prevention and a necessary adjunct to treatment efforts (1). However, published studies of attempts to validate this proposition are scarce.

The second belief is that treatment for addiction reduces the criminal activities of drug abusers. This view is based on the premise that addicts commit criminal acts at least in part to finance their drug use. Successful treatment reduces their dependence upon illegal drugs and therefore their need to commit crimes. Several investigations have demonstrated that criminal activity of individuals in drug abuse treatment programs seems to decrease during and after treatment (2–5). Still undetermined is the extent to which these decreases in criminal activity are attributable to the effects of treatment (6, 7), or can be explained in terms of biased self-reports of criminal activities (8), differential mortality, maturation effects, or a statistical regression artifact.

The third belief, which is the main focus of this report, hypothesizes that legal pressure on addicts facilitates their treatment for addiction. Looney and Metcalf (9), for example, have distinguished between internal and external pressures that lead drug abusers to seek treatment. Based on their clinical experience, they concluded that internal motivation is "worth little unless augmented by other kinds of pressure." For drug abusers above the age of 18, the external motivation is usually legal pressure. Looney and Metcalf concluded that "no addict successfully seeks treatment for his addiction without the stimulus of strong external pressure."

Although many drug abuse treatment authorities would endorse these assertions, the literature on this important question is inconclusive (10). It suggests that a weak positive relationship between legal pressure and treatment outcome may exist but could be attributable to other factors, such as the positive relationship between legal pressure and age. The relationship may also depend on the type of legal pressure and the type of treatment.

This report describes the relationships among four measures of legal pressure and treatment retention and completion rates in five treatment modalities. The analyses tested the hypothesis that legal pressure is positively related to retention when the effects of age are controlled by statistical techniques.

METHOD

Facilities

The Drug Dependence Unit (DDU), New Haven, Conn., a multimodality addiction rehabilitation facil-

Based on a paper presented at the Second National Drug Abuse Conference, New Orleans, La., April 2–6, 1975.

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ity, has been described in detail by Kinsella and associates (11). The five DDU treatment programs we studied are Alpha House, a residential program for adolescents; Daytop, a residential therapeutic community for young adults; Veritas House, a day program for adolescents; Low Intervention Program (LIP), an outpatient abstinence and narcotic antagonist program that primarily serves young adults; and Methadone, a program for opiate abusers over the age of 21.

Population

During the period from January 1, 1971, to December 31, 1973, 1,083 persons applied for treatment at the DDU for the first time. More than half (N=619) did not enter treatment. Of those who did enter treatment, the distribution among the programs was as follows: Daytop, N=131; Methadone, N=113; Alpha House, N=36; Veritas House, N=66; LIP, N=58; and other treatment programs, N=60. This study analyzed the relationships among legal pressure at the time of application and rates of retention and treatment completion for the 404 members of the five DDU treatment modalities through June 30, 1975.

Measures

Legal pressure was defined to exist if the applicant reported being on probation, on parole, or awaiting trial at the time of application. The fourth measure of legal pressure was a logical composite of these three legal pressure statuses. Clinicians monitored client participation in treatment by sending weekly program status reports to the research unit.

RESULTS

Applicant Group Characteristics

The 404 applicants who were admitted for treatment (37.3%) were significantly older than the 619 who were not admitted (means=23.1 and 21.9 years, respectively, $p<.001$, t test). Applicants who were on parole were significantly more likely to enter treatment than those who were not on parole (48.4% versus 36.3%, $p<.05$, chi-square test) but those who were on probation or awaiting trial were no more likely to be admitted to treatment programs than those who were not on probation or who had no cases pending. The composite measure of legal pressure (either on parole, on probation, or with litigation pending) showed that applicants with at least one type of legal pressure were significantly more likely to be admitted than applicants with no legal pressure (40.1% versus 33.7%, $p<.05$, chi-square test). Distributions by sex, race, and principal drug of abuse did not differ between those admitted and those not admitted to treatment.

Admissions Group Characteristics

Table 1 summarizes the characteristics of clients admitted to the five treatment programs. The programs differed significantly in the percentages of clients who were on probation, on parole, or had legal cases pending. The differences were greatest for the composite measure of legal pressure. Table 1 also shows that probation and pending litigation were about equally frequent as sources of legal pressure (33.9% and 34.9%, respectively), while only 10.9% of the total admissions were on parole at the time of their application for treatment. The five programs did not differ significantly in sexual or racial composition, but clients admitted to Methadone were older (mean=27.8 years) than those admitted to LIP (mean=24.1), Daytop (mean=22.1 years), Veritas (mean=19.6), and Alpha (mean=18.6). All programs differed significantly from each other in terms of age with the exception of Alpha and Veritas. As Expected, primary heroin abusers accounted for virtually all admissions to Methadone but for significantly fewer admissions to the other programs.

Legal Pressure and Treatment Outcome

As of June 30, 1975, 212 (52.4%) of the clients had terminated this first treatment episode in bad standing, 29 (7.2%) had been expelled, 5 (1.2%) had been incarcerated as the result of postentry criminal offenses, 39 (9.7%) had been referred to other treatment facilities, 22 (5.4%) terminated against program advice but in good standing, 30 (7.4%) continued as active program members, and 67 (16.6%) had successfully completed treatment. Table 2 presents the percentages of clients with and without legal pressure who graduated. Chi-square analyses were conducted to test the hypothesis that legal pressure at the time of application is associated with successful completion of treatment for addiction. For each of the three types of legal pressure and the composite measure, a 2 × 2 contingency table of Legal Pressure × Treatment Completion Status (graduate versus nongraduate) was constructed for each treatment program. None of the chi-square tests approached the .05 level of significance. These outcome data showed no relationship between treatment completion rates and any of the four measures of legal pressure.

Retention in Treatment

Although legal pressure was not related to successful completion of treatment as defined by graduation, legal pressure may be positively related to retention for the majority of clients who did not meet the rather stringent criteria for graduation. If the benefits of treatment are positively correlated with retention, then legal pressure might facilitate treatment even though it does not influence the rate of successful completion. To test this possibility, a series of four two-way analyses of variance was performed on the retention times of all nongraduates. The two independent variables were program (5 levels) and pressure (2 levels). The pressure variable was alternately probation status parole status, pending litigation status, or the composite measure of legal pressure. The results showed a substantial Program main effect but no main effect or inter-

TABLE 1
Characteristics of Clients Admitted to Treatment Programs, in Percents

Characteristic	Treatment Program: Veritas (N=66)	Alpha (N=36)	Daytop (N=131)	LIP (N=58)	Methadone (N=113)	Total (N=404)	Analysis: χ^2	df	p
Sex									
Male	72.7	77.8	84.7	77.6	77.9	79.2	0.36	4	n.s.
Female	27.3	22.2	15.3	22.4	22.1	20.8			
Race									
Black	33.3	25.0	40.8	36.2	42.5	38.0			
White	62.1	72.2	56.2	60.3	49.6	57.3	9.62	8	n.s.
Latino	4.5	2.8	3.1	3.4	8.0	4.7			
Drug of abuse									
Heroin	62.1	47.2	84.7	60.3	99.1	78.2	73.44	4	.001
Other	37.9	52.8	15.3	39.7	0.9	21.8			
Probation									
No	48.5	47.2	61.8	69.0	85.8	66.1	35.89	4	.001
Yes	51.5	52.8	38.2	31.0	14.2	33.9			
Parole									
No	87.9	88.9	90.8	72.4	96.5	89.1	23.46	4	.001
Yes	12.1	11.1	9.2	27.6	3.5	10.9			
Pending litigation									
No	54.5	58.3	61.8	70.7	74.3	65.1	9.62	4	.04
Yes	45.5	41.7	38.2	29.3	25.7	34.9			
Composite legal pressure									
No	22.7	19.4	26.7	31.0	63.7	36.4	52.26	4	.001
Yes	77.3	80.6	73.3	69.0	36.3	63.6			
Total	16.3	8.9	32.4	14.4	28.0	100.0			

TABLE 2
Percentage of Graduates, by Legal Pressure

Legal Pressure	Program: Veritas (N=66)	Alpha (N=36)	Daytop (N=131)	LIP (N=58)	Methadone (N=113)
Probation					
No	28.1	11.8	11.1	20.0	11.3
Yes	35.3	15.8	8.0	38.9	12.5
Parole					
No	31.0	15.6	9.2	26.2	11.9
Yes	37.5	0.0	16.7	25.0	0.0
Pending litigation					
No	30.6	9.5	11.1	26.8	11.9
Yes	33.3	20.0	8.0	23.5	10.3
Composite					
No	26.7	14.3	11.4	16.7	12.5
Yes	33.3	13.8	9.4	30.0	9.8

action involving any of the four measures of legal pressure. The cell means for these analyses, displayed in table 3, indicate that 15 of the 20 comparisons showed greater mean retention for the group not under legal pressure. None of the t tests for these comparisons was statistically significant. Scheffé multiple comparison tests showed that the significant Program main effects were attributable to the much longer mean retention in Methadone compared with the four other clinical programs, which did not differ among themselves.

Significant mean within-programs correlations of age with retention ($r=.172$, $p<.001$), parole status ($r=.162$, $p<.001$), and probation status ($r=-.250$, $p<.001$) indicated that, within programs, 1) older applicants tended to be retained longer than younger applicants, 2) applicants who entered treatment while on parole were older than those not on parole, and 3) applicants who entered treatment while on probation were younger than those not on probation. None of the measures of legal pressure was significantly correlated with retention.

In order to distinguish the possibly confounded effects of age and legal pressure on retention in treatment, the four analyses of variance (ANOVAs) were repeated with age included as a third independent variable. This procedure allowed assessment of the effects of age on retention independently and in interaction with program and pressure. Since age was related to both program and pressure, median splits were performed according to age within each of the Program × Pressure cells of the ANOVA design. Thus, there were two levels of age, above and below the median, which were determined separately for the 10 cells.

The four ANOVA results generally were similar to the results of the Program × Pressure analyses except for a significant main effect for Age, i.e., older applicants were retained longer than younger applicants. In addition, the ANOVA that included probation pro-

TABLE 3
Mean Days of Retention for Nongraduates, by Legal Pressure

	Program									
	Veritas (N=45)		Alpha (N=31)		Daytop (N=118)		LIP (N=43)		Methadone (N=100)	
Legal Pressure	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Probation										
No	23	107.6	15	124.1	72	108.7	32	95.7	86	470.7
Yes	22	103.7	16	90.1	46	124.9	11	67.0	14	480.0
Parole										
No	40	112.0	27	112.4	108	114.3	31	84.9	96	472.6
Yes	5	55.8	4	67.3	10	122.5	12	97.1	4	455.5
Pending litigation										
No	25	107.7	19	120.8	72	120.8	30	94.8	74	491.0
Yes	20	103.3	12	84.0	46	105.4	13	73.5	26	471.8
Composite										
No	11	119.7	6	198.7	31	88.7	15	99.7	63	487.7
Yes	34	101.1	25	84.4	87	124.4	28	82.2	37	445.2

TABLE 4
Analysis of Variance: Retention in Treatment

Source	Degrees of Freedom	Mean Square	F	p
Age (A)	1	340755.3	5.13	.023
Probation (B)	1	10378.5	0.16	n.s.
Program (C)	4	2226027.0	33.51	.001
A×B	1	388124.5	5.84	.015
A×C	4	64758.4	0.98	n.s.
B×C	4	13735.8	0.21	n.s.
A×B×C	4	166231.6	2.50	.042
Error	317	66423.3	—	—

duced two significant interactions involving age and probation. Table 4 presents the summary table for this ANOVA. The significant Age main effect resulted from the fact that older applicants remained in treatment longer than younger applicants (247.7 days versus 183.3 days). The significant Age × Probation interaction showed that older applicants who were on probation had a significantly lower mean retention (100.1 days) than older clients who were not on probation (296.1 days). Retention of younger applicants did not differ according to their probation status. The second-order Age × Probation × Program interaction indicated that the Age × Probation interaction was obtained primarily in the Alpha and Methadone programs. These two interactions reflect the only significant effects of legal pressure on treatment progress. They indicate that older applicants who entered Alpha and Methadone while on probation were likely to terminate treatment earlier than either older applicants who were not on probation or younger applicants regardless of their probation status. This finding contradicts the major hypothesis that legal pressure facilitates treatment for addiction.

DISCUSSION

The principal finding of this study was that older Methadone and Alpha House clients who were admitted for treatment while on probation were retained for shorter periods of time than clients who were not on probation. No other differences in retention or graduation rates involving any of the four measures of legal pressure were statistically significant. This finding indicates that older clients on probation were greater risks for early attrition in Methadone and Alpha House. It also suggests the possibility that legal pressure inhibits rather than facilitates treatment for addiction.

Why should differences in retention of clients on probation be related to age? One explanation might be that older clients in these programs are more aware that leaving treatment is not considered a serious violation of the conditions of their probation. Once they have escaped the immediate threat of incarceration, older clients may prefer risking further action from probation officers to participating in a rigorous treatment regimen. For whatever reasons, the consequences of violating probation were not generally effective in motivating retention in treatment.

The high attrition rates in drug abuse treatment pro grams suggest that clients need to be highly motivated to change their life-styles before treatment can be effective. The greater the external compulsion toward the goal of abstinence, the less the clients need to modify their beliefs, attitudes, and motivations in pursuit of this goal. The nonvoluntary client can always persuade himself that he is participating in treatment activities primarily to avoid incarceration. He may be more likely than the internally motivated volunteer to remain passively alienated from treatment activities and to avoid accepting personal responsibility for treatment outcome.

The failure of involuntary clients to develop commitments to treatment goals may adversely affect the morale of treatment staff and dilute the quality of treatment delivered to volunteer clients. Perpich and associates (12), for example, reported that criminal justice referrals were arrested more often during treatment and were more likely to continue illicit drug use than volunteers. Since involuntary clients outnumber volunteers 2 to 1 and are more difficult to treat, they often receive a disproportionate share of clinical attention. The predominance of nonvolunteers also contributes to the development of program procedures and regulations emphasizing the social control aspects of rehabilitation, which is less than optimal therapy for volunteers. These factors reduce the probability of successful treatment of volunteers.

The prognosis for volunteers might be enhanced by establishing more stringent motivational criteria for admission of nonvolunteers to treatment programs. At present, any type of legal pressure is viewed as a positive indication of treatment success. The results of this study, along with those of Perpich and associates, indicate that just the opposite is true. Applicants who are referred by the criminal justice system should be screened especially carefully for signs of intrinsic motivation toward abstinence and commitment to the treatment regimen. Nonvolunteers who do not meet the motivational criteria could receive inpatient treatment with increased motivation for abstinence as the goal.

Outcomes of treatment for nonvolunteers might be improved by stricter supervision and closer liaison with the referring agencies of the criminal justice system. Many of these referrals believe that dropping out of treatment will not jeopardize their legal status. A policy of vigorous enforcement of existing penalties for violating the conditions of parole or probation would make it more difficult for the nonvolunteers to leave before treatment is completed.

Although legal pressure motivated many of these clients to apply for treatment, there is no evidence that it improved their graduation or retention rates. Legal sanctions against unprescribed drug use, therefore, should not be justified on the grounds that they increase the probability of successful treatment. Furthermore, since clients with legal pressure did no better than those without legal pressure in any of the programs, legal pressure should not be used as a criterion for assigning applicants to specific treatment modalities.

CONCLUSIONS

Our results suggest that, during a time when legal pressure on drug users seems to be increasing, there is no evidence to demonstrate its effectiveness in facilitating their rehabilitation. This indicates the need for more definitive research on the effects of withdrawing legal pressure, types of legal pressure, enforcement of legal pressure, and various program ideologies within types of treatment. Future research also should consider measures of rehabilitative success other than retention. The proposition that legal pressure facilitates treatment for addiction is a causal assertion, and its verification requires experimental procedures with random assignment to conditions. Correlational approaches cannot provide sufficient evidence for causal relationships between legal pressure and treatment outcome.

Our findings merely suggest that legal pressure does not enhance the probability of successful rehabilitation. Clients under legal pressure might not have been retained as long if they had not been obliged to enter treatment. This possibility could be tested either by assigning legal pressure at random to clients prior to their entry into treatment or by withdrawing legal pressure at random from clients after they have entered treatment. In either case, differences in treatment outcome could be attributed to the presence or absence of legal pressure.

Definitive information on this issue is desirable from a humanitarian point of view, because legal pressure may be more dysfunctional than drug abuse. Without good empirical evidence that it benefits the individual or society either by decreasing drug abuse incidence rates or increasing the efficacy of treatment, continued support of legal pressure for drug-related offenses may perpetuate a misdirection of diminishing treatment resources.

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Journal Policy on Multiple Authorship

It has come to our attention that there has been some misunderstanding regarding the *Journal's* policy on polyauthorship. The number of authors listed on a paper is not a factor in the review and acceptance/rejection procedure. However, once a decision has been made to publish a paper, we do apply *Journal* policy regarding the number of authors in the by-line: only principal researchers and writers of articles are listed in the by-line; collaborators who have provided technical and other assistance are acknowledged in a footnote. In papers that list more than 4 people as principal authors, we query the first author to verify that those individuals were substantial contributors to the research or ideas reported. Since certain types of psychiatric research may require multiple workers, we will of course include all of the names in these cases.

Routine On-Line Psychiatric Diagnosis by Computer

BY JOHN H. GREIST, M.D., MARJORIE H. KLEIN, PH.D., AND HAROLD P. ERDMAN, M.S.

With the advent of effective psychiatric treatments, greater accuracy in psychiatric diagnosis has become a vital concern for psychiatric training, research, and patient care. The authors have adapted current computer diagnostic procedures in order to obtain highly accurate diagnoses while simplifying and shortening the process of information input and diagnostic output. Their program requires a minimum of the clinician's time and provides feedback during the diagnostic process when the clinician requires it. The authors believe that routine use of this computer diagnostic program will improve psychiatric training, research, and patient care.

SINCE THERE ARE now different and effective treatments for various psychiatric disorders, accurate diagnosis is no longer an intellectual exercise or simply a research requirement. When one is dealing with psychiatric patients, especially acutely psychotic patients, it is important to identify early in treatment disorders that are likely to respond to specific treatments.

In clinical settings, particularly, clinicians need help with psychiatric diagnosis. Many studies have shown a relatively low reliability between clinicians' diagnoses of the same patient (1–3). Clearly, most clinicians are not able to remember and obtain diagnostically relevant data, organize and retain diagnostic logic, eliminate their biases, and use diagnostic labels in the ways they were intended. In contrast to this experience, high diagnostic reliability has been reported by research groups using standardized diagnostic criteria and decision-making procedures (4–7).

Recognizing the problems inherent in the psychiatric diagnostic process (as well as the lack of objective measures analogous to the pathognomonic constellations of laboratory tests and tissue biopsies that are available in most of medical practice), several workers (8–12) have attempted to harness the computer's unquestionable reliability to improve psychiatric diagnosis. Spitzer and Endicott have made a sustained effort in this field, and their work deserves special comment. They have evolved 3 diagnostic programs, DIAGNO I (13), DIAGNO II (14), and DIAGNO III (15, 16), all of which use data obtained from clinician-completed forms. Because mental status data were found to be sufficient for diagnosis by the program (at least for newly admitted patients), more detailed historical material was deleted from the diagnostic algorithm. Output was in the form of 79 psychiatric diagnoses listed in the American Psychiatric Association's *DSM-II* (17).

In one study (15) comparing DIAGNO III diagnoses with diagnoses made by an "expert" diagnostician and a psychiatric resident or psychology intern who performed a detailed initial evaluation of 100 consecutively admitted psychiatric patients, agreement between the computer and the admitting clinician's diagnoses was as good as that between diagnoses of the admitting clinician and the expert diagnostician; in 65 cases there was complete agreement. In 20 of the 35 cases where there was disagreement the computer diagnosis would have aided the clinician, but it would have been misleading in the remaining 15 cases. In these 15 cases 9 diagnoses were invalid because of "specific ratings made by the therapist on the forms which did not seem justified or even likely." For the remaining 6 invalid diagnoses the authors found that the "computer algorithm was insensitive to a clinical distinction that both the therapist and the senior author were able to make" (p. 527). Poor quality input data and insensitivity of diagnostic algorithms appear to be the major problems with computer-assisted diagnosis in psychiatry. Clinicians find repetitive completion of a standardized form to be so boring that they may become careless. Part of this attitude results from the lack of timely and meaningful feedback from these computer programs.

Spitzer and Endicott (15) reported that the inadequacies of the diagnostic algorithm were partly attributable to the

> ambiquity in the definition of many of the categories of the official nomenclature. For several cases, the ambiguity in distinguishing between psychotic and nonpsychotic conditions resulted in disagreements in diagnosis that would be difficult to resolve between any two experienced clinicians who followed the less than precise recommendations of *DSM-II*. (p. 529)

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Spitzer and Endicott commented that the use of "more precise definitions of psychiatric disorders, such as those that have been recently proposed by the group at the Washington University School of Medicine at St. Louis [4], would undoubtedly avoid some of these problems" (p. 529). *DSM-III*, which is scheduled to appear in 1978, will emphasize more specific operational criteria than its predecessors did (18).

NEW DIAGNOSTIC CRITERIA

The collaborative program on the psychobiology of depressive disorders sponsored by the Clinical Research Branch of the National Institute of Mental Health (NIMH) has developed Research Diagnostic Criteria (*RDC*) (19) that are derived in large part from the work done at the Renard Hospital (Washington University, St. Louis). Although the primary focus of the NIMH study is depression, it has been necessary to differentiate depressed patients from those with other affective disorders, thought disorders, neuroses, personality disorders, and alcohol and other drug-abuse problems.

One problem with the *RDC* as presently constituted is their complexity, which becomes clear when they are applied. For example, to make a diagnosis of "mania" the clinician must satisfy the following 5 specific criteria: 1) elevated or irritable mood; 2) 3 of 7 manic symptoms if mood is elevated and 4 if mood is only irritable; 3) illness duration of more than 1 week or hospitalization required; 4) impairment of meaningful conversation or impaired social, family, or occupational functioning; and 5) exclusion of schizophrenia. The specificity and complexity of the criteria give this approach its considerable predictive power, but it is this same specificity and complexity that make it difficult for clinicians to use the *RDC* efficiently in routine clinical settings.

ON-LINE DIAGNOSIS

In order to make the diagnostic procedure easy to use we have turned to interactive computing techniques (20). As an initial step in the development of a computer consultation program we have adapted *RDC* procedures so that the clinician can directly and quickly obtain research diagnoses for patients he or she is seeing.[1] The clinician interacts directly with a computer terminal by reading questions or statements on a television screen and responds by pressing keys (usually a single number) on a typewriter keyboard (see figure 1). The decision-making process involves the use of branching logic between questions that is contingent upon the clinician's responses, as well as code written in the MIIS computer language to speed up the process. In this way, the number of questions presented to the clinician by the computer terminal is kept to a minimum and completion time for the program (which includes 25 diagnoses) is between 10 and 15 minutes.

FIGURE 1
Illustration of the Interaction Between Physician and Computer in On-Line Psychiatric Diagnosis



Information gathered during the interview is stored in variables, e.g., counting the number of manic or depressive symptoms present, and at decision-making points these can be tested to see if the criteria for a particular diagnosis have been met. At any point that a diagnosis can either be definitely confirmed or rejected, further questions relevant to that diagnosis are terminated. Decisions made on previous diagnoses are also stored in 1 variable that is checked when making diagnoses that are mutually exclusive. A physician-computer dialogue is illustrated in appendix 1.

DISCUSSION

This approach to collecting data and the capacity of the computer to keep track of and weigh the criteria until they are sufficient (or insufficient) for a diagnosis make the *RDC* applicable for routine clinical use. Twenty-five diagnoses are presently included in the computer program. When fully developed, this approach will be a great improvement over "computerized" diagnostic procedures available in the past. In earlier systems the clinician had to administer a complex structured interview and record answers in a complicated mark-sense format (i.e., he or she made marks in specific boxes on a form and the marks were sensed by an optical scanning device) just to obtain information that could be computer processed. Further delays in data entry, as well as time involved in running computer programs and reporting results to the clinician, made this process lengthy and cumbersome (15, 16).

[1]A Digital Equipment Corporation PDP-15 supporting MIIS software is used for this work. At present there are more than 50 compatible systems in the United States supporting more than 1,200 independent users. Other systems are located in Germany, France, and Brazil.

Our program is constructed to use the *RDC* in a way that will make the diagnostic process highly accurate, requiring a minimum of the clinician's time, with feedback during the diagnostic process when the clinician requires it. In effect, the program uses the substance of the *RDC* exactly as it was intended, but considerably simplifies and shortens the process of information input and diagnostic output so that the clinician can routinely use the program to obtain research-quality diagnoses. More than 30 clinicians have used the program in a preliminary trial and, with 1 exception, felt that the diagnoses they received were accurate and helpful. Most users described patients who had presented difficult diagnostic problems and were often surprised that the computer's diagnosis agreed with their own.

Based on our experience with other medical and psychiatric consultation programs, clinicians' use of this program will alert them to information needed for accurate diagnosis and will sharpen their interviewing and diagnostic skills even when they are not using the program. Computer consultation programs of this kind appear to be a very effective teaching device since they are employed at the time that clinicians need to learn specific information to solve a clinical problem.

The diagnostic program can include sample cases representing a range of diagnostic problems. Clinicians can "work up" these cases, with the computer providing prompt feedback on the effectiveness and efficiency of their approach. These sample or test cases can serve as one measure of the diagnostician's skill, and cases can be added to emphasize new developments in the field of diagnosis. When this case workup approach is integrated with the summary diagnostic statements that clinicians receive regarding specific patients they describe (see the last frame of appendix 1), it provides a new level of immediacy and authenticity in teaching psychiatric diagnosis.

Continual updating of the clinician's program will be necessary as new diagnostic information becomes available. For example, a recently reported (21) association between EEG patterns and bipolar affective disorder could be incorporated into the program if it is found to hold up in replication studies. Other data from longitudinal case studies, verified descriptions of symptoms and signs, laboratory tests, family histories, and empirical records of response to treatment will be included as they are found to be diagnostically useful.

Deficiencies of earlier programs more typically resulted from the poor quality of data available for processing than from fundamental weaknesses in the diagnostic algorithms employed. Investigations are under way to evaluate what effects the use of branching for data collection and immediate diagnostic feedback will have on the clinician's use of the program. Using the standardized and complete data collected by the program, we are also beginning to study the accuracy of diagnoses obtained, with the intention of improving the diagnostic algorithm when possible.

While the clinician's version of the program is being tested, we are also developing a parallel version to collect information directly from the patient (when feasible) and, using the same diagnostic decision process developed for the clinician program, to provide diagnoses to be verified by the clinician.

With the advent of effective psychiatric treatments, greater accuracy in psychiatric diagnosis has become a vital concern for psychiatric training, research, and patient care. Routine use of this computer diagnostic program can have an impact on each of these areas.

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APPENDIX 1
A Model Physician-Computer Dialogue for On-Line Psychiatric Diagnosis

HOW LONG HAS THE PRESENT EPISODE BEEN OCCURRING?

1. LESS THAN 2 DAYS
2. 2 TO 7 DAYS
3. 8 TO 14 DAYS
4. 15 TO 30 DAYS
5. 31 DAYS TO 3 MONTHS
6. 3 MONTHS TO 2 YEARS
7. MORE THAN 2 YEARS

PHYSICIAN'S ANSWER: #4

HAS THE PATIENT BEEN HOSPITALIZED FOR TREATMENT OF THIS EPISODE OF ILLNESS?

1. YES
2. NO
3. DON'T KNOW

PHYSICIAN'S ANSWER: #2

TYPE NUMBERS THAT CORRESPOND TO SYMPTOMS OR SIGNS YOUR PATIENT HAS.

1. THOUGHT BROADCASTING, INSERTION, OR WITHDRAWAL
2. DELUSIONS OF CONTROL, OTHER BIZARRE OR MULTIPLE DELUSIONS
3. DELUSIONS OTHER THAN PERSECUTORY OR JEALOUSY
4. DELUSIONS WITH HALLUCINATIONS
5. AUDITORY HALLUCINATIONS
6. NONAFFECTIVE VERBAL HALLUCINATIONS
7. DEFINITE INSTANCES OF FORMAL THOUGHT DISORDER
8. CATATONIC MOTOR BEHAVIOR
9. NONE OF THE ABOVE

PHYSICIAN'S ANSWER (MORE THAN 1 O.K.): #9

TYPE NUMBERS THAT CORRESPOND TO SYMPTOMS OR SIGNS YOUR PATIENT HAS.

1. MORE ACTIVE OR RESTLESS THAN USUAL (AT WORK, SOCIALLY, OR SEXUALLY)
2. MORE TALKATIVE THAN USUAL OR FELT A PRESSURE TO TALK ON
3. FLIGHT OF IDEAS OR RACING THOUGHTS
4. INFLATED SELF-ESTEEM
5. DECREASED NEED FOR SLEEP
6. DISTRACTIBILITY
7. EXCESSIVE INVOLVEMENT IN ACTIVITIES WITH A HIGH POTENTIAL FOR PAINFUL CONSEQUENCES
8. NONE OF THE ABOVE

PHYSICIAN'S ANSWER (MORE THAN 1 O.K.): #1, 2, 3, 5, 7

TYPE NUMBERS THAT CORRESPOND TO SYMPTOMS OR SIGNS YOUR PATIENT HAS.

1. WEIGHT CHANGE (GAIN OR LOSS OF 1 LB/WEEK OVER SEVERAL WEEKS OR 10 LBS/YEAR WHEN NOT DIETING)
2. INSOMNIA OR HYPERSOMNIA
3. LOSS OF ENERGY, TIRED, OR FATIGUED
4. PSYCHOMOTOR AGITATION OR RETARDATION
5. LOSS OF INTEREST OR PLEASURE IN USUAL ACTIVITIES (INCLUDING SEX)
6. SELF-REPROACH OR INAPPROPRIATE GUILT
7. COMPLAINTS OR EVIDENCE OF DIMINISHED ABILITY TO THINK OR CONCENTRATE
8. THOUGHTS OF DEATH OR SUICIDE
9. NONE OF THE ABOVE

PHYSICIAN'S ANSWER (MORE THAN 1 O.K.): #1

HAS YOUR PATIENT HAD ONE OR MORE DISTINCT PERIODS OF PREDOMINANTLY ELEVATED OR IRRITABLE MOOD? (MOOD CHANGES SHOULD BE A RELATIVELY PERSISTENT OR PROMINENT PART OF THE ILLNESS, OR OCCUR FREQUENTLY, BUT MAY ALTERNATE WITH A DEPRESSED MOOD. IF ALCOHOL OR OTHER DRUG INTAKE HAS BEEN GREAT ENOUGH TO AFFECT MOOD, ANSWER NO).

1. MOOD ELEVATED
2. MOOD IRRITABLE
3. MOOD ELEVATED AND IRRITABLE
4. NONE OF THE ABOVE

PHYSICIAN'S ANSWER: #3

HAS YOUR PATIENT SOUGHT HELP FROM SOMEONE DURING THIS EPISODE OF ILLNESS OR HAD IMPAIRED FUNCTIONING SOCIALLY, WITH FAMILY, AT HOME, OR AT WORK?

1. YES
2. NO

PHYSICIAN'S ANSWER: #1

DIAGNOSIS* MANIA*
RDC WERE:

A. DURATION 15 TO 30 DAYS (>1 WK. OR HOSP. REQUIRED)
B. 5 MANIC SYMPTOMS (3 REQ. IF MOOD ELEVATED, 4 IF IRRITABLE)
C. MOOD ELEVATED AND IRRITABLE
D. SEVERITY (HOSP. OR CONVERSATION IMPOSSIBLE OR SOCIAL, HOME, OR WORK IMPAIRMENT)
E. 0 SCHIZOPHRENIC SYMPTOMS (1 ALLOWED)

REVIEW MANIA RDC IN GREATER DETAIL?

1. YES
2. NO

PHYSICIAN'S ANSWER: #2

The Effect of Lithium on Impulsive Aggressive Behavior in Man

BY MICHAEL H. SHEARD, M.D., JAMES L. MARINI, PH.D., CAROLYN I. BRIDGES, M.A., AND ERNEST WAGNER, M.D.

The authors conducted a double-blind, placebo-controlled study of the effect of lithium on aggressive behavior. The 66 subjects, who were prisoners in a medium security institution, ranged in age from 16 to 24 years, were physically healthy and nonpsychotic, and had histories of chronic impulsive aggressive behavior. Subjects received lithium or placebo daily for up to 3 months. There was a significant reduction in aggressive behavior in the lithium group as measured by a decrease in infractions involving violence. The authors suggest that lithium can have a clinically useful effect upon impulsive aggressive behavior when this behavior is not associated with psychosis.

PRELIMINARY REPORTS (1–4) have suggested that lithium exerts an inhibiting effect on chronic human aggressive behavior and therefore might be useful in the treatment of some forms of pathological aggressiveness in man. The previous work, however, consisted of single-blind (1–3) or nonblind (4) studies, and confirmation of these reports, as well as development of treatment criteria, requires further research using double-blind procedures. The study we will describe was a three-year double-blind evaluation of the effect of lithium on the aggressive behavior of incarcerated delinquent males with histories of chronic impulsive aggressive behavior.

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This study was supported by Alcohol, Drug Abuse, and Mental Health Administration grant MH-21934 from the National Institute of Mental Health.

The authors would like to thank the inmates and staff of the Correctional Institution, Cheshire, Conn., especially Mr. James Teel, for their cooperation, and Mr. Josh Auerbach for statistical consultation.

Slow-release lithium (Priadel) was supplied by Delandale Laboratories, Canterbury, England. Rowell Laboratories, Inc., Baudette, Mich., provided placebo.

METHOD

Subjects

The subjects were male inmates aged 16-24 at the medium security Correctional Institution at Cheshire, Conn. The criteria used for subject selection were 1) conviction for serious aggressive crimes (e.g., manslaughter, murder, rape, assault) plus a history of chronic assaultive behavior and/or a history of chronic impulsive antisocial behavior, 2) freedom from psychosis, 3) good physical health with no renal, cardiac, or organic brain disease, 4) ability to comprehend the written material used in the study, 5) sentence of sufficient duration to ensure time for completion of the study, and 6) termination of any psychoactive medication with consent of the prescribing physician.

Subjects were referred by the institution's counseling staff, who had been given a detailed description of the study. A subject's suitability was determined by the staff psychiatrist (E.W.) and the senior investigator (M.H.S.). The selected subjects were then presented with a detailed oral explanation of the study, including purpose, risks, and possible benefits. After a 1–2 week waiting period they were asked if they were willing to participate. Those who agreed were required to sign a consent form. Identical consent forms signed by parents or guardians were required for subjects under 18.

Of a total of 159 referrals, 101 subjects were judged suitable and agreed to participate. A total of 80 remained in the study long enough to receive medication. Of these, 14 dropped out of the study or were transferred, giving a sample of 66 individuals. Mean ages (±SD) were 19.4±1.76 years for lithium subjects and 19.5±1.49 years for placebo subjects.

Procedure

Subjects were paid $3.75 a week for their participation whether or not they completed the experiment, and those who did finish or whose termination was beyond their control (e.g., transfer to another institution) received a bonus of $2.50 a week. Thus the total pay was $6.25 a week, for a maximum of $125.00 for 5 months, which is equivalent to the monthly remuneration for the best paying inmate jobs at the institution. Throughout the study, the subjects continued their normal routines aside from the 1–2 hours each week when they performed study tasks and evaluations. They re-

ceived no special privileges or amenities within the institution.

Initial evaluations. All subjects received a standard physical workup and mental status evaluation. Data on personal history were obtained, as well as information on brain damage (Memory-For-Designs Test [5]). IQ was measured by the Peabody Picture Vocabulary Test (6) and, in some cases, the Raven Progressive Matrices Test (7). The Lykken Sociopathy Scale (8) was also administered. In addition, all subjects received an initial evaluation battery consisting of the Minnesota Multiphasic Personality Inventory (9), the Rotter I-E Scale (10), the Eysenck Personality Inventory (11), The Buss-Durkee Hostility Inventory (12), the Adjective Check List (13), and the Personality Research Form (14).

Experimental design. The 5-month experimental protocol began with 1 medication-free month that served as a control period. During the next 3 months subjects were given once-daily doses of either sustained-release lithium carbonate (Priadel) or an identical-appearing placebo. The fifth month was again drug-free. Placebo contained sodium carbonate, sodium bicarbonate, and dicalcium phosphate dihydrate in a ratio of 2:3:4.

Subjects were randomly assigned to lithium or placebo by the senior investigator or a laboratory research assistant, with the constraint that the groups not differ in number by more than 3 subjects at any given time. The study staff—a psychopharmacologist (J.L.M.), a psychologist (C.I.B.), and a psychiatrist (E.W.)—were blind to medication assignment, as were all of the personnel at the institution. Lithium and placebo were packed in identical capsules, and each subject received 5 capsules once a day. Serum lithium levels were assayed weekly and adjusted when necessary by altering the amount of lithium within the 5 capsules. Thus, placebo subjects took 5 capsules containing placebo daily and the lithium subjects took 5 capsules containing placebo and varying amounts of lithium. The goal was to maintain 24-hour serum lithium levels in the range of 0.6–1.0 mEq/liter. Subjects also completed a weekly 24-item symptom checklist, which included 7 lithium "target symptoms": shakiness or hand tremor, drowsiness, nausea, vomiting, polyuria, anorexia, and diarrhea.

Assessment of change. Four measures were used to evaluate changes in behavior or attitude during the study.

1. The number of infractions of institutional rules committed by the subjects was determined from reports routinely issued by the institutional staff, who were blind to the medication received. In this institution, infractions are defined as major ("reports") and minor ("tickets"). Major infractions consist of serious threatening behavior or actual assaults and result in loss of privileges and, frequently, time in the "hole" (segregation unit). Minor infractions are less serious offenses such as possession of contraband or being out of place and usually are punished by loss of recreational privileges. The number of infractions was compared in two ways: 1) comparisons for all subjects for equal periods before, during, and after medication, and 2) month-by-month comparisons throughout the study.

2. A test battery consisting of the Multiple Affect Adjective Check List (15), Arrow-Dot Test (16), Common Annoyances Test (17), and the Rosenzweig Picture Frustration Test (18) was administered each month.

3. The tests used in the initial evaluation battery were repeated during the final drug-free month at least 2 weeks after the final dose of medication.

4. Behavior rating scales were completed by the authors weekly.

Statistical analysis. The data were analyzed by means of Student's t-test, chi-square tests, analyses of variance and covariance, and linear discriminant function analysis.

RESULTS

Of the 66 subjects, 34 received lithium for periods of 3 months (N=20), 2 months (N=8) or 1 month (N=6), and 32 received placebo for 3 months (N=21), 2 months (N=9), or 1 month (N=2).

Personality, Psychological, and Demographic Data

There were significantly more black subjects in the placebo than in the lithium group (53.1% versus 20.6%, $p<.01$), and the significant difference in IQ shown in table 1 is due to a significant racial difference on the vocabulary-based IQ test we used. This difference was not found when the nonverbal Raven Progressive Matrices Test was used as a measure of IQ.

TABLE 1
Results of Initial Battery of Psychological and Personality Tests

Test	Lithium Group (N=34) Mean	Lithium Group (N=34) SD	Placebo Group (N=32) Mean	Placebo Group (N=32) SD
MMPI				
Psychopathic deviance scale	78.4	9.9	77.2	6.3
Manic scale	81.0	8.0	79.7	10.5
Eysenck Personality Inventory				
Neuroticism	12.9	4.6	13.0	4.5
Extraversion	13.9	3.6	13.7	4.5
Rotter I-E Scale	12.1	3.3	11.5	2.7
Lykken Sociopathy Scale	17.2	4.1	16.8	3.7
Buss-Durkee Hostility Inventory				
Total	29.2	6.9	31.7	6.4
Physical	8.09	1.59	8.21	1.10
IQ (Peabody Picture Vocabulary Test)*	93.0	15.9	83.9	10.0

*Lithium group significantly higher than placebo group ($p<.01$).

The very high scores on the Rotter I-E Test indicate that the subjects in both groups feel that controls stem from outside themselves, and high Lykken scores indicate a lack of anxiety and high risk-taking preference. A very high percentage of subjects in both groups came from broken homes, had lost a parent before the age of 16, or had been adopted or placed in foster homes. Antisocial behavior before the age of 12 was common in this group and continued from the ages of 12 to 18. Eighty to ninety percent of the subjects had been incarcerated for 1 or more years between the ages of 12 and 18, and there were comparable percentages of reports of significant fighting under the age of 12 and between the ages of 12 and 18. This was an extremely manipulative, hostile, and aggressive group of young men who were extroverted, highly impulsive, and action oriented. The MMPI, while not highly reliable with this type of subject, showed the usual peaking on the psychopathic deviate and manic scales. Various test scales measuring hostility showed extremely high scores. In general, the subjects can be classified as having nonpsychotic personality disorders.

Serum Lithium Levels

Twenty-four hour serum lithium levels and the average dose for each week on medication are shown in table 2.

Infractions

Table 3 shows that the lithium group had significantly fewer major infractions and fewer total infractions while on the medication than the placebo group. Minor infractions showed a tendency to increase during the medication period for both placebo and lithium groups.

Figure 1, which illustrates infractions committed from month to month, shows a progressive drop in major infractions for the lithium group. Independent t tests of month-by-month changes show a just significant difference in major infractions for the fourth month ($p=.05$). It is interesting to note that the number of infractions starts to rise again in the fifth month, which was drug-free. Analysis of variance revealed a significant Drug × Monthly Test Interval interaction ($p<.02$), indicating that the progressive decrease in infractions in the lithium-treated group was related to medication regimen. Because of the difference in racial composition of the lithium and placebo groups, an additional analysis of variance was done with this variable added (Drug × Monthly Test Interval × Race). This analysis also showed a significant difference between the groups ($p<.03$), indicating that the statistically significant difference was not due solely to the racial factor. An analysis of covariance using the average major infractions during the premedication period as a covariate approached significance for the third month and was significant for the fourth month ($F[1, 38]=4.34$, $p<.05$) and for the sum of the third and fourth months ($F[1, 36]=5.5$, $p<.05$) of medication.

TABLE 2
Average Weekly Serum Lithium Levels and Dose for Lithium Group

Medication Week	N	Serum Lithium (mEq/liter) Mean	SD	Dose (mg)
1	32	.68	.27	1212
2	31	.64	.20	1229
3	29	.81	.29	1482
4	33	.76	.32	1524
5	29	.77	.30	1563
6	25	.80	.29	1571
7	22	.78	.25	1550
8	24	.77	.28	1541
9	19	.73	.24	1554
10	21	.89	.29	1600
11	20	.89	.13	1652
12	16	.89	.36	1691

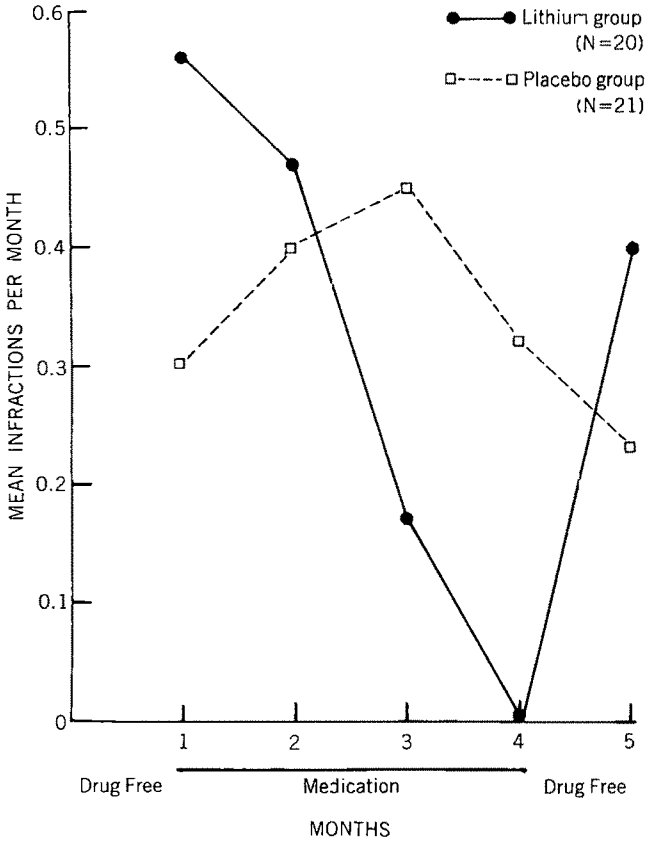
TABLE 3
Total Number of Infractions for Equivalent Periods of Time Before and During Medication

Type of infraction	Placebo Group (N=31) Pre-medication	Placebo Group (N=31) On Medication	Lithium Group (N=28) Pre-medication	Lithium Group (N=28) On Medication
Major	34	32	54	23*
Minor	27	40	29	34
Total	61	72	83	57**

*Significantly different ($p<.01$).
**Significantly different ($p<.05$).

A further analysis of the infraction data revealed that of the 41 subjects who completed 3 medication months, 8 of 20 lithium subjects versus 5 of 21 placebo subjects had no infractions (not significantly different). Of the 17 subjects who completed 2 months, 5 out of 8 in the lithium group and none of the 9 in the placebo group received no infractions ($\chi^2=9.74$, $p<.01$). Of the 8 subjects who completed 1 month, 5 out of 6 lithium and none of 2 placebo subjects had no infractions ($\chi^2=7.98$, $p<.01$). Using each subject as his own control for major infractions, we found a significant difference in the lithium group between predrug infraction scores and medication period infraction scores ($t=3.6$, $p<.01$). There was no significant difference for the placebo group on this comparison. A linear discriminant function analysis was performed using the fourth-month scores of major infractions, the arrow-dot test, the MAACL (hostility subscale only), and the Common Annoyances Test. The infraction scores had the greatest weight, the MAACL hostility score the next greatest, and the arrow-dot test scales had reasonably high weights. The discriminant function was significant for these three tests ($p<.01$) and for the major infractions and MAACL hostility together ($p<.05$).

FIGURE 1
Comparison of Major Infractions per Month for the Lithium and Placebo Groups



Evaluation of the Double-Blind

The success of the double-blind procedure was evaluated by an analysis of guesses of group assignment by staff and subjects (19). The three staff members' guesses did not differ from chance either taken as a group or individually. However, the subjects' guesses as a group did achieve significance ($p<.05$). When the guesses of the lithium and placebo group were analyzed separately, we found that the placebo group did not guess at a better than chance level, whereas the lithium group's guesses were highly significant (80% correct, $p<.01$).

Side Effects

During the 1-month premedication period, the average weekly target symptom scores of the lithium and placebo groups were not significantly different. On medication, however, the lithium subjects reported a significantly higher target symptom score each week of the 3-month drug period ($p<.01$). For the 4 postdrug weeks there was again no significant difference between the two groups. A total of 16 subjects who received medication quit the experiment—14 had received lithium and 2 placebo. The placebo subjects both reported that they quit because they disliked the experiment, but of 11 lithium subjects who dropped out and gave reasons, 10 reported side effects. The side effects reported most frequently were hand tremor or shakiness, dryness of mouth, polyuria, and nausea (20).

DISCUSSION

This study provides further evidence that lithium can have an inhibitory effect on impulsive aggressive behavior as measured by reduction of incidents of such behavior while on the medication. Although the difference in racial composition reduces the comparability of the two groups, the analysis of variance allowing for the racial difference still showed a significant medication effect on major infractions. Moreover, there were few significant differences between the two groups on the psychological tests of the initial evaluation battery despite the racial difference.

Particularly supportive of the antiaggressive effect of lithium is the progressive decline in infractions month-by-month to zero by the fourth month in the lithium group. The fact that minor infractions tended to increase over the same period suggests that lithium did not merely globally inhibit behavior. It should also be pointed out that the lithium group had a greater number of infractions than the placebo group in the predrug period. This difference is accounted for by 5 individuals who had a greater number of infractions in the predrug period than the rest of the subjects. This aggressive behavior occurred over an extended period of time, however, and was not a function of some unusual short-lived episode. Moreover, it biases the lithium group in a direction that would be expected to operate against achieving a significant effect with lithium.

In view of the length of the study, an overall variation in the frequency of major episodes might have led to a skewed distribution. However, an examination of the data did not suggest that this was the case. Moreover, this would be important only if there were some periods during which only lithium or placebo subjects were assigned to the study, which was not the case. Also, it is possible that subjects who finished the course might have had a different pretreatment frequency of major episodes than those who dropped out before being treated. Our data cannot fully answer this question, but a comparison of 31 subjects who finished 11–12 medication weeks with 32 who dropped out before 11 weeks did not reveal a significant difference in predrug major infractions.

The evaluation of the double-blind methodology revealed that the lithium subjects could guess that they had received lithium, presumably from the side effects they experienced (19). Although this means that using lithium and placebo in this fashion cannot be said to be rigorously double-blind, it is also true that lithium subjects did not subjectively experience any more benefit from the medication than did the placebo group, as was shown by a specific questionnaire administered to each subject at the end of his participation (21). Therefore, although they could identify the medication, they

did not feel it was necessarily making a change in their behavior and thus they were not subject to a positive suggestive effect from the medication.

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An Interpersonal Approach to Hysteria

BY DAVID CELANI, PH.D.

The author defines hysteria in terms of specific observable classes of interpersonal behaviors and examines the impact of these behaviors on the receiver. The hysteric communicates frailty and helplessness, thus structuring the interpersonal environment to ensure attention and inhibit aggression. The development of these roles is shown in histories of female hysterics, who were selectively reinforced for frailty, seductiveness, and passivity as children. The major classes of symptoms shown by adult hysterics—conversion symptoms and dissociative reactions—reflect these interpersonal roles. The author concludes that hysteria is a relatively specific interpersonal style that results from cultural, social, and interpersonal influences.

IN THE PAST, "hysteria" was defined exclusively by the presence of specific symptoms, defense mechanisms, or dynamics. The publication of Chodoff and Lyons' paper on the behavioral characteristics of hysterics (1) began a trend in which hysteria was perceived as a personality type that was correlated with certain symptoms but essentially independent from them. Other papers that followed used the behavioral diagnosis and focused on descriptive and demographic material (2, 3), somatic disturbances (4), as well as the characteristics of interpersonal (5) and verbal (6) behavior. Despite this trend, there is still a lively debate within the psychodynamic school regarding the oral or phallic origins of the conflict that ultimately produces hysterical behavior (7). This paper is an attempt to present a unified picture of this personality type from the interpersonal-communicational viewpoint.

CLINICAL DESCRIPTION

In females, the most general description of the hysterical interpersonal style is an exaggeration and overplaying of the feminine social role. Chodoff and Lyons' behavioral description of hysteria (1) was abstracted from the existing dynamically oriented literature and accurately portrays the extreme state of this personality type.

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> The hysterical personality is a term applicable to persons who are vain and egocentric, who display labile and excitable but shallow affectivity, whose dramatic, attention seeking and histrionic behavior may go to the extremes of lying and even pseudologia phantastica, who are very conscious of sex, sexually provocative yet frigid, and who are dependently demanding in interpersonal situations. (1, p. 736)

Most of these behaviors can be seen at infrequent intervals in nonhysterical women since they are appropriate (in moderation) to the feminine social role; it is possible that they will be seen less as the concepts of women's liberation become part of the culture. It would be difficult if not impossible for a male to qualify as a hysteric if these behavioral characteristics were the absolute arbiters. Males can have hysterical personalities (8) without necessarily conforming to female sex-role behaviors. The problem lies in defining hysteria in terms of specific behaviors without considering the interpersonal purpose or impact of the behaviors.

The most basic assumption in the interpersonal approach is that all behaviors of individuals in interactions represent attempts to produce in the other person an emotional state that will tend to elicit a predictable response (9). A second assumption is that all individuals have a need to keep their behavior in line with their self-perceptions and their perceptions of others. Neurotics are viewed as individuals with faulty self-perceptions that require constant confirmation by others. To achieve this end, they adopt powerful although limited roles that elicit the interpersonal confirmation (praise, rejection, nurturance, etc.) that they crave. When the definition of hysteria is expanded to describe a specific type of interpersonal communication with a specific interpersonal goal, then both sexes can be judged independently of cultural stereotypes.

Halleck (5) assessed the interpersonal impact of the hysteric's behaviors on the receiver and concluded that these behaviors were an effective means of coercing others to respond in a predictable manner.

> The hysteric's demandingness, histrionics and dishonesty should be viewed as purposeful actions designed to structure the interpersonal situation so that she can manipulate the responses of others in a manner which assures their continued interest and affection. (5, p. 750)

When a male is confronted by a female who uses the previously described interpersonal behaviors, his responses will probably include interest, helpfulness,

and guidance. Behaviors that would be inhibited include expressions of aggression, countercomplaints of weakness, and disinterest. The male may also be tempted to respond to the provocative behavior with subtle (or not so subtle) messages about his sexual interest and prowess. Thus we have a situation in which the hysteric's communications about herself have created an emotional climate in the receiver that limits and directs the respondent's behavior to a few choices (9). If neither party actively recognizes what is going on and if the male responds with "continued interest and affection," the interaction will proceed smoothly. If, however, the male attempts to follow up the initial message of provocativeness with sexual behavior, the interaction will often take a turn for the worse, ending with the hysteric outraged at his advances. Halleck (5) views this approach-avoidance behavior as the result of the hysteric's need to control others: "Her sexual charms are suitable weapons in a quest for power since she is less dominated by a need to gratify erotic drives than she is interested in ultimate control of the sexual object" (5, p. 751).

A similar conclusion was reached by Farber (10), who views hysteria as a disorder of the "will," specifically, as excessive willfulness. Willfulness denotes the expansion and distention of the will to the point where the hysteric is completely unyielding to external influences and dominates and subjugates all those in his/her environment. This is accomplished by the forceful use of "personal decoration" in communications with others. The theatrics and histrionics that accompany the communications from hysterics completely overwhelm the content and emphasize the style of the sender. The listener is forced to choose between style and content, and the former easily dominates. The result is that the listener is reduced to making an "aesthetic response," which is usually a response to one of the two implicit questions, "Am I pretty?" and "Am I bright?" Farber also sees conversion symptoms as expressions of willfulness; however, in these cases the body is the object of domination: "What he would not move was paralyzed; what he would not hear deafened him; what he would not see blinded him" (10, p. 106).

BASIC INTERPERSONAL MESSAGE

Imbedded within the hysteric's dramatic overplayed communication is a second-level message or metacommunication. This metacommunication arises from the incongruity of an adult acting like a child or, most commonly, a woman acting like a young girl. The impact of the message is derived from the summation of excessive affectivity, coy provocativeness, gross exaggerations, and play acting. The message basically states, "I am a weak, helpless, frail child and am at your mercy," although, as Farber (10) points out, there can be variations of this implicit message. The covert metacommunication produces the affective response (emotional climate) in the listener, which in turn limits and directs his behavior toward the hysteric. Kell and Mueller (11) observed this aspect of hysterical communication and commented on the incongruity of a message of "weakness" that was very forcefully presented: "Often these clients will utilize a tremendous affective barrage involving highly dramatized speech, tears, and marked affective changes, all of which are intended to intensify the power of the communication that they are fragile" (11, p. 49).

All of the hysterical characteristics I have described are designed to create and fortify the basic interpersonal message, which can be considered the cardinal interpersonal diagnostic sign of hysteria. There is nothing inherent in the communication of frailty and helplessness that excludes males, and a few men do use this interpersonal style (11, p. 53). Luisada and associates (8) reported that the most commonly seen symptom in male hysterics was suicidal thoughts, which tend to elicit attention, concern, and helpfulness when reported to others. Thus it appears that males use different interpersonal behaviors to get the same message across. In fact, only 4 out of the 27 male hysterics in the Luisada and associates study (8) used effeminate interpersonal behaviors.

Paradoxically, the apparently helpless hysteric acts as a powerful agent of interpersonal and environmental control. By simply adopting the helpless role, he/she structures the overall relationship, captures attention, and motivates others to please him/her. Szasz (12, p. 13) originated the concept that the weakness-helplessness role of childhood was the psychological prototype for hysteria; however, his focus was on the implicit communications of conversion symptoms rather than on the overt communicative behavior of hysterics.

Berblinger (6) focused his analysis of hysterical communication on the vagueness and evasiveness of the hysteric's speech. He concluded that the central deficit in hysteria was a lack of introspective ability. The interpersonal approach assumes that the communication and the impact on the receiver is the primary goal of the individual and that internal states (lack of introspective ability) are the result rather than the cause of the adopted role. The same analysis can be applied to the hysteric's vague and global perceptual style (13). When a hysteric is presented with an inkblot stimulus that resembles an animal, her response might be to cover her eyes and look away to demonstrate her fright. Similarly, her verbal report might be "Oh! A wild animal!"—again, emphasizing her fearfulness and weakness. Shapiro (13) argues that this type of perceptual style is a purely internal set; however, it is equally possible that the social and interpersonal consequences of this behavior act to reinforce and maintain the perceptual style. In either case, the affect-laden, vague, and global verbal behaviors convey the specific type of interpersonal message that restricts the future responses from others to those few interactions that confirm the faulty self-perceptions of the hysteric.

INTERPERSONAL GOAL

There is some slight disagreement as to the interpersonal purpose of the hysteric's role, although Farber's questions ("Am I pretty?" "Am I smart?") can be subsumed under Halleck's general observation that hysterics crave continued interest and attention. In both cases, the hysteric appears to want to be interpersonally engaged with others, but on her own terms. MacKinnon and Michels (14) view the hysteric's interpersonal style as a method that allows partial satisfaction of a desire to relate to others but at the same time avoids the possibility of a clear-cut rebuff: "Seductiveness and superficial warmth with the opposite sex permit the avoidance of deeper feelings of closeness, with consequent vulnerability to rejection" (14, p. 120).

The purely interpersonal analysis of the goal of the hysteric's behavior relies on the previously mentioned congruency hypothesis. In this case the hysteric creates an interpersonal world that responds to her in a manner that is congruent with her own self-attitudes. These include feelings of weakness, powerlessness, and worthlessness (except as a sex object). Thus the world responds to her exactly as she predicts it will, and her essential sense of self remains secure.

DEVELOPMENTAL HISTORY

The recurrent interpersonal patterns seen in adult hysterics are the result of long-term social and interpersonal patterns that occurred during the formative years. There is some agreement in the literature that the histories of hysterics are characterized by deprivation of love and attention. What is more significant developmentally are the types of behaviors that were reinforced (albeit infrequently) with love and attention within this generalized state of deprivation.

Much more is known about the developmental histories of female than male hysterics because there are so many more females in this category; therefore, this section will focus on typical histories of female hysterics.

Mothers of female hysterics are often observed to be subtly competitive and envious of their husbands, as well as self-indulgent and unable to spend much time with their children. Often, the only time the mother is willing to pay attention to her daughter is when she is called on to emit behaviors that enhance her and her role, e.g., when her children are sick or hurt and she can demonstrate her "motherliness" to herself and to others. However, she falls short in the less dramatic but more important day-to-day needs of her children, which offer few possibilities for self-enhancement. Thus the child is selectively reinforced for physical disorders; she receives maternal attention only as a result of her frailty, disability, or illness. Hollender (15) feels that this is the crucial moment for the development of the hysteric. The young girl senses that her mother is unable to supply her with the genuine emotional sustenance that she needs: "Young girls, who become hysterical personalities, turn to their fathers not as fathers, but as substitute mothers. Since they barter sexual attractiveness, they grow up to be women who use sex as a means—often the prime means—of obtaining maternal gratifications from men" (15, p. 22).

Not surprisingly, fathers of female hysterics have often been described as superficially charming and mildly seductive. There is often covert strife between husband and wife, which is further exacerbated by the reciprocally seductive relationship between father and daughter. This relationship is often used by the husband as an affront to his wife; thus, the interaction has multiple interpersonal payoffs. In this manner the female child learns that provocativeness is the only sure path to the attention and affection of males and that other females are competitors to be blocked out. Again, as with the mother, the hysteric's father fails to supply her with noncontingent affection and attention. The hysteric soon learns she is constantly in the "manipulative marketplace" (11) in that she must perform a certain role if she is to get gratification. The constant search for gratification is carried out at a high level because of the basic affective deprivation and because whatever gratification she receives is the result of a clear-cut interpersonal trade rather than a spontaneous expression of affection. As a result, the hysteric is never sure that she is loved, since she has performed strenuously to elicit any love she receives. Only when she stops performing and still receives love can she begin to believe in her own inherent worth. Unfortunately, few take this risk since there is always the possibility of an outright rejection.

SELF-ATTITUDES

The net result of this type of childhood is a group of self-attitudes that are interpersonally crippling. The history of playing the coquette for her father and of experiencing the false motherhood role performed by her mother, coupled with the vague impressionistic perceptual style that hides her real feelings and favors externalization, tends to feed back into the hysteric's self-perception. Hysterics often report that they perceive themselves as lacking in substance: "It seems that the hysteric's romantic, fantastical, non-factual and insubstantial experience of the world also extends to his experience of his own self. He does not feel like a very substantial being with a real and factual history" (14, p. 120).

This is the logical result of playing a complementary interpersonal role to others. During childhood the hysteric is called upon to adapt her behavior to the "lead players." Thus she never gets to experience direct power or success. Rather, she is limited to taking on a limited number of roles at the behest of others. This type of recurrent interpersonal experience does not favor the building of a strong sense of personal history or accomplishment.

A second aspect of the hysterics' self-attitudes is the distortion of their perceptions of worth and power. The child soon learns that she is positively regarded for certain attributes (cuteness, seductiveness, weakness) and ignored when she does not display this limited repertoire of behaviors. The only way in which she can contribute to the outcome of a situation is by skillfully integrating her wishes within her performances. This results in a distorted sense of power, in that the desired outcome has to be disguised within a role. Interpersonally, this translates into adult situations in which the hysteric manipulates others with one of her roles (passivity, illness, seductivity, etc.). The manipulator is never given credit for her accomplishments (or failures) since the activity was mediated by another person. This continues the myth that hysterics are weak and others are strong.

Eventually the hysteric believes that she is truly powerless. Her dependency on others is based partially on her subjective feelings of weakness as well as the necessity of involving another person in order to carry out her plans, since she is unable to assume the instrumental role. As time passes, many hysterics build up large reservoirs of hostility directed at those "in power." Developmentally, all expressions of anger were not reinforced and ultimately became incongruent with the developing self-attitudes of passivity, femininity, and girlishness. The only safe way that the hysteric can vent her rage is within her overlearned roles. Interpersonally, this translates into the celebrated "castration" scene. This interaction occurs most successfully when a male accepts a female hysteric's definition of him ("You are strong") and of her ("I am weak"). Within this framework, the male is often tempted to oversell his attributes. As soon as this occurs, the hysteric can allude to a real or imagined weakness, generally in some area of the male's accomplishment, power, or knowledge. The male is often particularly vulnerable, since he has already overstepped the reality of his accomplishments and either ends up defending a lie or admitting his grandiosity. The apparently powerful are temporarily toppled and the hysteric gains some measure of revenge.

The extreme endpoint of indirect control of others is the situation in which the hysteric uses threats of self-destruction to defeat those in her environment. In this interaction a close bond between the players—usually marriage—is a prerequisite, and the husband is often autocratic. The most effective of indirect attacks is self-destruction that is defined as a loss of control or power on the husband's part. The husband is then reduced to the role of guarding his wife and hiding all potential instruments of self-destruction (pills, alcohol, knives, etc.). In this way, the husband becomes the prisoner of his wife's behavior because his exercise of dominance is under her control.

The same sort of approach-avoidance behavior that characterizes the sexual behavior of hysterics also appears in a more general form in their relationships with men. Often the hysteric uses her entire behavioral repertoire in order to attract a new man. Each untried man holds out the possibility of alleviating the original affective deprivation, as well as providing the strength and success that the hysteric feels is out of her direct reach. As soon as the man shows any signs of weakness, the adequacy challenges begin, i.e., the hysteric becomes doubtful that he is "really strong." It often appears that the hysteric is very intolerant of any male sex-role abdication since it destroys the illusion that the male is a savior. Many men married to hysterics learn (perhaps much to their delight) that they must appear hypermasculine in order to allay the anxieties of their wives.

SYMPTOM FORMATION

When an individual with a well-developed hysterical personality structure is stressed by environmental events, two relatively specific classes of symptoms are likely to develop—conversion symptoms and dissociative states. Conversion symptoms can occur in other diagnostic groups (1); however, when they occur in hysterics, they can be viewed as the most potent interpersonal technique in the hysteric's armamentarium. As Szasz (12) has pointed out, this type of interpersonal role forces others to take care of the hysteric, while at the same time absolving her of blame. Perhaps most importantly, it is a situation in which culturally designated hyperadequate males (doctors) will be interpersonally involved. Continued interest and affection are assured as long as the symptoms persist.

The second class of symptoms displayed by hysterics, dissociative reactions, usually occur when the individual has exhausted the interpersonal environment (16). That is, the hysteric finds herself in a situation in which she is unable to elicit the type of responses from others that confirm her basic sense of self. Feedback that is contradictory to the hysteric's self-attitude increases anxiety and sets the stage for flight. In these cases the hysteric abruptly switches roles, an accomplishment limited to those individuals with a long and successful history of role-playing. Perceptually, the hysteric selectively screens out specific classes of stimuli, and when she shifts roles, the classes of perceived and nonperceived stimuli shift as well. The whole process recalls Farber's (10) discussion of willfulness and self-domination, which in these cases relates to an entire social role.

CONCLUSIONS

Hysteria can be viewed as a relatively specific interpersonal style that results from cultural, social, and interpersonal influences. The definition of hysteria has evolved from a symptom-based definition to an interpersonal diagnosis based on specific overt and covert communications that structure the interpersonal environment. The basic communication is one of frailty,

weakness, and helplessness and can be used by both sexes, although cultural factors favor its use by females. The interpersonal role used by female hysterics is an overplaying of the feminine role, which tends to structure the interpersonal environment in a manner that ensures male interest and attention while inhibiting male aggression. More importantly, by restricting the range of responses from others, the hysteric ensures that those responses which have been elicited will be confirmatory to and congruent with her own self-attitudes. The lack of affective conciseness, coupled with the often superficial and flirtatious relationships with men, suggests that these behaviors help the hysteric avoid commitments and substantive relationships with males that present the possibility of direct rejection. The vague and global perceptions of the hysteric, often thought to be at the core of the hysteric's personality, may be the consequence of external reinforcement, since the style of perception aids in structuring the environment.

The developmental histories of female hysterics suggest that they are selectively reinforced for certain interpersonal roles, including illnesses, frailty, seductiveness, and passivity. These roles probably feed back into the self-attitudes of hysterics, particularly in regard to their feelings of worth and power. Goal-directed behavior is often indirect and limited to influencing the behaviors of others.

Finally, the typical symptoms in hysterics reflect the roles of weakness, passivity, and frailty. Often the symptoms involve the interpersonal engagement of physicians, which is assumed to be highly reinforcing for this group.

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1976 Anniversaries

BY GEORGE MORA, M.D.

The author recalls this year's anniversaries of events and individuals prominent in the history of medicine, psychiatry, and psychology and examines their practical or theoretical contributions.

1676

Sir Matthew Hale, a British Lord Chief Justice who was born in 1606, died in 1676. Hale maintained an active interest in the legal aspects of insanity throughout his long judiciary career. His *History of the Pleas of the Crown* (1736) was said to have influenced eighteenth- and nineteenth-century lawyers more than any other single work on the subject of law and insanity. Under "ideocy," i.e., idiocy and imbecility, he considered *fatuitas a nativitate* (stupidity from birth) and *dementia naturalis* (inborn witlessness).

According to Hale, some degree of stupidity had to be present in a defendant for a successful defense of insanity. The tests of intelligence he used were based on the person's ability to reach the level of discretion, that is, the age of 14. Although not conclusive, this evidence had to be brought forward to the jury (Hale was also a strong supporter of the jury system). *Dementia accidentalis* (acquired insanity) was distinguished from witlessness from birth in his view, and permanent insanity was distinguished from insanity interpolated with lucid intervals. The distinction that Hale made between total insanity and partial insanity (disorder of only certain functions with unimpaired reason) remained a basic legal tenet for three centuries. Hale also held that cases of *dementia affectata* (insanity due to influence of toxic substances) constituted a special category.

From the practical viewpoint, Hale emphasized that the focus in legally determining insanity not be on the action performed by the defendant but on his or her state of mind. Therefore, in cases of homicide it was important to pass a judgment on the state of mind of the defendant because a verdict of acquittal could be obtained in cases of insanity.

The new Bethlem, that is, a newly rebuilt Bethlem Hospital, was opened in London. This hospital, originally built in the thirteenth century and then placed under the protection of the City of London in the following century, was seized by the Crown in 1375; at that time it had already been used for acutely ill mental patients. Returned eventually to the city in 1546, Bethlem had become increasingly dilapidated by the time of the great fire of London in 1666. It was then decided to build a new Bethlem Hospital on land made available at Moorfields, where Liverpool Street Station now stands. The new construction, built by the architect Robert Hooke in a grandiose style at a cost of £17,000, was considered more like a palace than a hospital. It was intended to be a reproduction of Tuileries Palace in Paris, a fact that apparently considerably offended Louis XIV. Prints of the building show an imposing frontage surrounded by pleasant greenery. Over the stone piers of the great gate sprawled two colossal statues—after the fashion of Michelangelo's "Night and Morning" in Florence—intended to represent two phases of mental disorders, dementia and acute mania. Beyond the door were the "Penny Gates," where the visitor put a penny in the money boxes. To the right and left of the entrance hall on both stories of the building were the galleries of the patients.

1776

David Hume, who was born in Edinburgh in 1711, died in 1776. Hume was influenced by natural philosophy in Scotland. In 1734 he moved to France, where he wrote *A Treatise of Human Nature* (1739), which attempted to introduce the use of the experimental method into the study of man. However, this important work passed largely unnoticed, while more attention was given to *An Enquiry Concerning Human Understanding and the Principles of Morals* (1751).

Hume's importance in the history of psychology lies in his contribution to sensistic associationism. Influenced by Locke, Berkeley, LaMettrie, Hartley, Rousseau, and others, Hume's thinking represents the final expression of the empirical school. Basing his criticism of knowledge in a careful recording of experiential data, Hume differentiated immediate impressions from ideas in the process of perception: impressions consist of sensations, passions, and emotions "which enter with most force" into consciousness; ideas are "faint images of these," "copies of our impressions." Moreover, although impressions are limited, thought is not tied either to nature or to reality; thought is the creative force of the spirit. Hume described three

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modes of association in the connection of successive ideas: resemblance, contiguity, and causality; these were eventually reducible to resemblance and contiguity in experience. In essence, Hume's psychology employs a strict empirical method and advances the epistemological conclusions that all knowledge is knowledge of experiences and that the relations of things in themselves can never be known. Indeed, the ego is nothing but "a bundle or collection of different perceptions," and the identity of the person is the result of the operation of imagination.

Hume's concepts greatly influenced Kant's critical philosophy in Germany and both the associationistic and the psychological trends in philosophy in England. At the beginning of the twentieth century, Hume was viewed as one of the main initiators of psychological elementarism; more recently, he has been considered a forerunner of phenomenological ideas.

Johann Kaspar Spurzheim was born at Longvick, Germany, near the city of Treves on the Moselle River. While in Vienna studying medicine, Spurzheim came under the influence of Franz Joseph Gall, who believed in the study of the human brain, and especially of the cortex, as the material basis of all mental and moral activity, the instrument through which all psychic manifestations take place.

Gall and Spurzheim emphasized the characteristics of the various areas of the brain ("organology") that developed in different ways because of different myelination. Because the skull is molded on the brain, they believed, it is possible to determine the shape of the brain by examining the shape of the skull.

Gall and Spurzheim were fine anatomists. Their system of psychophysiology centered around four main points: 1) moral and intellectual qualities are innate (this point was at variance with the tenets of sensism); 2) the functioning of these qualities is strictly related to the organic structure (for this belief Gall and Spurzheim were accused of materialism and of fatalism); 3) all of the faculties and feelings are localized exclusively in the brain (this idea conflicted with the idea that passions are localized in the thorax or in the abdomen); 4) rather than "the organ of the soul," the brain is composed of as many organs as there are faculties, tendencies, and feelings. Specifically, Gall described 25 centers, of which man had 19 in common with animals and 8 specific to man, including the organ of religion. This last idea did not prevent Gall's lectures from being prohibited in 1802 as antireligious.

After an extensive teaching tour through several German cities, Gall and Spurzheim eventually settled in Paris in 1807 and established a successful medical practice. Between 1810 and 1819 their four-volume work *Anatomie et Physiologie du Système Nerveux en Général et du Cerveau en Particulier* appeared. The first two volumes were coauthored by Spurzheim and Gall, and the last two were written by Gall alone. Spurzheim left Gall in Paris in 1813 and spent time in France, England, Scotland, and Ireland. He finally accepted invitations to come to the United States.

Phrenology had already been recognized in the United States due to the crusading attitude of Dr. Charles Caldwell from the medical school of Transylvania, a number of books on phrenology, and the *Phrenology Journal and Miscellany*, first published in Edinburgh in 1823. Perhaps one reason for the success of this movement in the United States was the liberal and progressive stance embraced by phrenologists in the fields of education and penology. After his arrival in New York City on August 4, 1832, Spurzheim stopped on his way to Boston at Yale and then at Hartford, where he met with Dr. Amariah Brigham, who founded the *American Journal of Insanity* in 1844. Spurzheim gave two very successful series of lectures in Boston but became ill suddenly and died in Boston on November 10, 1832. On the day of his funeral, November 17, the Boston Phrenological Society was founded; it remained active until 1842. Spurzheim's skull, heart, and brain have been preserved among the specimens in the collection of this society.

Phrenology later became known in the United States through the work of George and Andrew Combe, Samuel Gridley Howe, Horace Mann, and L.N. and O.S. Fowler. By the 1840s, when enthusiasm for phrenology began to decline, it had been embraced by several outstanding psychiatrists, such as Pliny Earle, John Galt, Isaac Ray, Samuel Bayard Woodward, and Amariah Brigham.

Johann Friedrich Herbart was born in Oldenburg, Germany. Educated at the University of Jena under Fichte, Herbart obtained his doctorate at Göttingen in 1802. From 1809 to 1833 he was professor of philosophy in Königsberg, where he succeeded Kant; from 1833 to his death in 1841 Herbart was professor of philosophy at Göttingen. In opposition to the concept of faculty psychology, Herbart conceived of mental images as conflicting among themselves and as emerging to the threshold of consciousness (a term he coined) according to their strength and the impact of inhibitions. He attempted to express these mechanistic concepts in mathematical terms.

In direct contrast to the vague ideas of the contemporary *Naturphilosophie* and of idealistic philosophy, Herbart's concrete representation of the psychic mechanisms had great appeal for their realism; in retrospect, however, it appears to have overlooked the unity of the personality. Regardless of this, Herbart's theories had considerable following in education, especially in emphasizing the positive value of proper experiences in very early life. In psychology, his concepts were the basis of psychometrics, of Wundt's emphasis on apperception, and of the ideas of the unconscious in the late nineteenth century. Among Herbart's works are *Compendium of Psychology* (1816), *Psychology As Science* (1824, 1825), *Encyclopedia of Philosophy* (1835), and *Psychological Research* (1839).

1876

William Maclay Awl, who was born in Harrisburg, Pa., in 1799, died in 1876. Awl studied medicine at the University of Pennsylvania in 1819 and 1820. He settled as a practitioner in Columbus, Ohio, in 1833. Recognizing the need for a facility for the mentally ill in Ohio, he was instrumental in founding the Ohio State Asylum for the Insane, which was opened in 1838; he was elected superintendent of that institution. Awl was among the 13 founders of the Association of Medical Superintendents of American Institutions for the Insane (now APA). He was elected Vice-President of the Association in 1846 and President in 1848.

Awl's name is especially remembered in connection with the so-called cult of curability (i.e., the belief that mental illness could be cured) of the early nineteenth century. In an 1843 report of the Ohio State Lunatic Asylum, Dr. Awl stated, "Per cent of recoveries on all recent cases discharged the present year, 100." Because of this, he came to be known among his contemporaries as Dr. Cure-Awl.

Samuel Gridley Howe, who was born in Boston in 1801, died in 1876. Howe was acclaimed as a hero for his participation as a soldier and a surgeon in the Greek war for independence from Turkey (1824–1830). By the time he was named head of the New England (Perkins) Institution for the Education of the Blind in 1832 (a position he maintained until his death), he had already achieved international fame as the teacher of Laura Bridgman, the first blind deaf-mute successfully educated by systematic means. Howe placed this pupil in contact with the world.

Under the influence of Spurzheim, who had come to the United States on a lecture tour, Howe became an ardent phrenologist. He was elected corresponding secretary of the newly established Boston Phrenological Society and was involved in maintaining a museum of phrenology that contained the skulls of many people, including Spurzheim. In 1838, a strong relationship developed between Howe and George Combe, an attorney converted to phrenology by Spurzheim two decades earlier who had come to Boston on a speaking tour.

Howe claimed that a proper body-mind relationship, a sound educational system, high morality, and even Christian ideals could be obtained through phrenology. He reached the highest degree of faulty phrenological reasoning in an article titled "The Heads of Our Great Men" (1838), in which he attempted to justify the soundness of the phrenological doctrine through post hoc reasoning. By the 1840s the phrenological movement, which had been embraced by some distinguished psychiatrists, began to fade, and the "science" of phrenology fell into the hands of all sorts of quacks.

In Milan Cesare Lombroso's work on the delinquent man, *L'Uomo Delinquente Studiato in Rapporto alla Antropologia, alla Medicina Legale ed alle Discipline Carcerarie*, appeared. The book was translated into the main languages soon after its publication in Italian. Cesare Lombroso was born into a Jewish family (probably from Spain) in Verona, Italy, in 1835. Through the indirect influence of Giambattista Vico (1668–1744), the Italian philosopher of history, Lombroso became interested in the socioanthropological study of cultures. While studying medicine at the universities of Pavia, then Padua, and then Vienna, Lombroso was attracted to the studies on magnetism, hypnosis, somnambulism, and dreams of G.H. von Schubert, J. Kerner, and L.F.A. Maury. Lombroso began to elaborate on the relation between dreams and insanity and on the regressive metamorphosis (similarities between individual and cultural or ethnic primitive expressions of behavior). In this study he found evidence for the influence of civilization on insanity. After graduation from the medical school of Pavia in 1858, Lombroso embarked on the long-term study of cretinism, which was then endemic in certain areas of Italy. At the same time he maintained a long-standing interest in the prevention of diseases and the fight against illiteracy.

In 1864 Lombroso presented his first study on genius and insanity at the University of Pavia. This later developed into *The Man of Genius* (English translation, 1891), which was based on a supposed correspondence between organic dispositions and moral tendencies. Against the traditional spiritualism in legal medicine, Lombroso advocated a bioanthropological study of the individual delinquent. He found justification for this view in the supposed "atavic" characteristics of many delinquents and their similarities with "inferior" races. Aside from some interest in the study of pellagra during 1863–1870, Lombroso continued to dedicate himself to the study of delinquency; he was the founder of the field of criminal anthropology.

In *The Delinquent Man* Lombroso emphasized the degenerative aspects of the delinquents he studied and advocated the substitution of social responsibility for moral responsibility and of prevention and therapy for punishment. Named professor of legal medicine in Turin in 1876 and professor of psychiatry there in 1880, Lombroso, with some colleagues and pupils, launched the magazine *Archivio di Psichiatria, Antropologia Criminale e Scienze Penali*, which was devoted to the concrete study of the mentally ill and of the delinquent. The magazine soon gained ample recognition and was imitated in other countries.

Eventually, Lombroso came to consider many "morally insane" individuals to be affected by latent forms of epilepsy. He advocated the substitution of hospitals for jails for the criminally insane and stated that more of the geniuses of the past than were thought so had been insane. These radical views, coupled with Lombroso's disregard for the rising fields of histopathology and neurophysiology, contributed to the fact that many students opposed his theories.

In time, Lombroso and his pupils became involved in the study of such other fields as political crimes, so-

cial and collective psychopathology, anarchism, psychopathology in women, and, finally, psychic science. Increasingly dissatisfied with the political and religious climate of Italy, Lombroso became a militant in the newly organized Socialist party there and did his best to improve the conditions of workers. He died in 1909.

In London *The Functions of the Brain* by David Ferrier appeared. Ferrier was born in Scotland in 1843. He was educated at the University of Aberdeen, where he came under the influence of Alexander Bain, and the University of Edinburgh. Following his graduation in medicine in 1870 Ferrier moved to London, where he lived until his death in 1928. In 1873, while experimenting on the animal brain at the West Riding Lunatic Asylum, Ferrier caused convulsive twitching or gross movements of particular muscles of the head with minimal currents from electrodes inserted in particular areas of the brain in a variety of animals. Although he was able to establish the motor area and certain sensory areas and eventually to map the entire motor cortex, he was not misled by the concept of cerebral localization. For Ferrier, the functions of the cerebrum were sensorimotor; this idea anticipated the modern concept of the brain as the organ of interaction.

In 1878, with John Hughlings Jackson, Sir John Bucknill, and Sir James Crichton-Browne, Ferrier founded the journal *Brain*. Connected chiefly with the National Hospital from 1880, Ferrier occupied the chair of neuropathology created for him at the Medical School of King's College in 1889. He was bestowed with many honors, including being named laureate of the Institut de France in 1878 and knighthood in 1911. In retrospect, he can be considered the link between Hughlings Jackson and Sherrington because he worked with Jackson in the 1870s and Sherrington worked with him in the 1890s.

William James inaugurated a course in experimental psychology, the first in the United States, at Harvard University. James was born in New York City in 1842 to an illustrious family. He was graduated from Harvard Medical School in 1869. While traveling in Germany in 1867–1868 he was impressed with the advances made there in the study of sensorial physiology and psychology. Although he was concerned with the need to establish psychology on an exact basis as a natural science, James admitted that its object is something entirely different from physical realities. James seemed unable to reconcile this apparent dichotomy, which is reflected in his own academic orientation: he taught philosophy at Harvard until 1889, then psychology for almost a decade, and philosophy again from 1897 on.

Generally recognized as the first great representative of American psychology, James strongly believed in a psychology of direct experience. *The Principles of Psychology* (1890), followed by *Psychology: Briefer Course* (1892), which were translated into several languages, gave James renown all over the world. Central to his view was the idea of a stream of consciousness or of thought that affects even the simplest psychic occurrence between stimulus and reaction. Sensation and thought are therefore seen to be in continuous states of fluctuation.

James distinguished between substantial and transitive ways of experiencing reality: the former related to particular content; the latter connected one experience to another. Also important in his theory was the differentiation between topic and focus of consciousness and fringe of consciousness. The stream of consciousness—the psychic reality—cannot be separated from corporeity; the emotions themselves are the result of bodily processes through the action of the neurovegetative system. This idea, which was supported by Carl Georg Lange (1834–1900) of Denmark, came to be known as the James-Lange theory of emotions. This theory was subjected to a great deal of criticism.

In James' view movements become simplified and selected and conscious attention decreases through the formation of habits. The identity of the individual experience, of the ego, or of the person is a temporal and structural element in the context of the stream of consciousness, to be viewed by the individual as ego in retrospect and as initial action in prospect. Language, which James felt was not appropriate for psychological phenomena, alters the original psychological experience by hypothesizing elements of reality and may be erroneously conceived of as the psychological reality itself. This idea caused a fundamental semantic problem because the only experienced reality is the one that can be verbalized.

In essence, according to James mental life must be studied as a whole and consciousness as a continuous stream. Unconcerned with any specific methodology, in contrast to Wundt, James neglected laboratory work. He turned over his laboratory to Hugo Münsterberg as soon as Münsterberg decided to remain at Harvard. In line with the American temperament, James preferred to study the mind from a functional perspective, which included unconscious, physical, abnormal, and animal behavior as well as religious experience, on which James wrote the pioneering *The Varieties of Religious Experience* (1902). Later in his career, James became one of the exponents of the philosophical movement of pragmatism, which he presented in his successful volumes *Pragmatism* (1907), *A Pluralistic Universe* (1909), and *The Meaning of Truth* (1909). He died in 1910.

James was a forceful personality and a convincing teacher and writer; his greatest accomplishment consists in his establishing psychology in the academic tradition. In the two decades after his death some of his main concepts were presented in different forms by Dilthey, by Husserl, and by the representatives of the Gestalt school. In recent years James has been considered by some a forerunner of the existentialist movement.

Constantin von Economo was born to noble and

wealthy parents in Braila, Romania. Von Economo grew up in an environment in which Greek, Italian, French, and German were all spoken. After his graduation from the medical school in Vienna in 1901, he practiced in Paris, Nancy, Strasbourg, and, later, in Munich under Kraepelin and Alzheimer. Back in Vienna in 1906, Von Economo became privatdozent in neurology and psychiatry and, later, professor in the psychiatric clinic, which was then under the direction of Wagner von Jauregg.

Von Economo's early studies dealt with the physiology and anatomy of the midbrain. His name is mainly remembered, however, for the discovery of the encephalitis lethargica that assumed epidemic proportions in 1917. Von Economo described this disease's clinical symptoms (e.g., disturbances of sleep, chorealike movements, and neuralgias) and the anatomopathological findings in the brain. He wrote a thorough monograph on the subject in 1929. In the field of pure brain research, Von Economo developed the concept of progressive cerebration, i.e., progressive evolutionary complexity of the cerebral functioning from early times on. In 1925 Von Economo published a text and an atlas of the citoarchitecture of the adult human cerebral cortex. He died in 1931.

Elmer Ernest Southard was born in South Boston, Mass. Southard excelled in his studies at the Boston Public Latin School and as a masterful chess player; he won many championships. While at Harvard University he was influenced by Josiah Royce in the field of philosophy and by William James in the field of psychology. While enrolled at Harvard Medical School in 1897, Southard was attracted to the study of pathology. After his graduation in 1901 he spent several months traveling in Europe; he returned to England in 1907 to work in Sherrington's laboratory in Liverpool.

Named instructor in neuropathology in 1904 and assistant professor in 1906 at Harvard, Southard also accepted the position of assistant physician and pathologist at the Danvers State Hospital, Mass., in 1904. Already well known for his many publications, he was named Bullard Professor of Neuropathology at Harvard Medical School in 1909; at the age of 33, Southard was probably the youngest man to be promoted to such a senior position (the department of neuropathology became a separate unit of the school at this time). At the same time, he was named to the newly created position of pathologist to the State Board of Insanity of Massachusetts.

One of Southard's principal achievements was the opening in 1912 of the Psychopathic Department of Boston State Hospital, which was conceived of as a center for prevention, observation, diagnosis, and short-term treatment of mental illness; patients were often accepted on an emergency basis here. More than 1,500 patients were treated here in the department's first full year of operation, 1913; nearly 2,000 were treated in 1914. In a short time the Psychopathic Hospital, under Southard's leadership, became well known as an educational center not only for students in medicine and psychology but also for students in ancillary disciplines. It is there that such distinguished American psychiatrists as Lawson Lowrey, Karl Menninger, Harry C. Solomon, and Karl Bowman received their training.

As early as 1911, Southard was clearly aware of the importance of social work. He appointed Mary C. Jarrett chief of social services at Boston Psychopathic Hospital. This department grew into the Training School of Psychiatric Social Work affiliated with Smith College in Northampton, Mass., in 1918. Considerable support for this project came from the National Committee for Mental Hygiene, founded by Clifford Beers in 1909, in which Southard was deeply involved. Out of Southard's interest in industrial psychiatry, for which he anticipated a considerable development, came his recommendation for a triadic working party among psychiatrists, psychologists, and social workers to be employed in juvenile courts and schools. This idea found its most fertile ground in the field of child psychiatry. Southard and Jarrett's volume *The Kingdom of Evils*, which appeared in 1922 (2 years after Southard's death), represented a comprehensive effort to overcome the most common social impediments to mental health, in particular, diseases and deficiencies, educational errors, vices and bad habits, legal entanglements, and poverty.

Southard openmindedly encouraged trials of psychoanalytic examinations at the Psychopathic Hospital. His personal attitude, however, was rather critical of the Freudian theory of pansexualism, the "emotional monism" inherent in it (at variance with the pluralism of the American philosophical tradition), and what he felt was dogmatism on the part of the Freudians. He castigated this dogmatism in his famous paper "The Mind Twist Versus Brain Spot" (1914). At the base of Southard's aversion toward psychoanalysis was probably his own exuberant personality, which he himself considered hypomanic and which accounted for his tremendous energy, as it contrasted to Freud's pessimistic orientation. In 1919 Southard published a paper titled "Sigmund Freud: Pessimist."

Shying away from the emphasis on classification of mental disorders, Southard supported instead the application of pragmatic psychiatry, for which he elaborated a "Key to the Practical Grouping of Mental Diseases" based on 11 groups. Among his most original contributions to psychopathology was a fundamental article on "The Application of Grammatical Categories to the Analysis of Delusion," in which he developed the evolutionary idea of a layered development of moods from the imperative among the savages through the indicative up to the subjunctive and optative in higher civilizations. Southard's major research centered around the study of the neurological aspects of syphilis, on which he and Harry C. Solomon published the ample monograph *Neurosyphilis* in 1917. That same year Southard was asked to assume the direction of the Boston unit of the U.S. Army Neuropsy-

chiatric Training Center. In 13 months he prepared 20 articles and 1 book, *Shell Shock* (1919), on the subject of shell shock.

Ideas for research continuously sprang from Southard's fertile mind, resulting in constant inspiration for all those who came in contact with him, including physicians, psychologists, artists, and literary men and women. The last year of his life, 1919, was marked by satisfaction as well as by disappointments. Elected President of the American Medico-Psychological Association (now APA), he was already experiencing difficulties in his work that resulted in his resignation as director of the Psychopathic Hospital and his appointment as director of the Massachusetts State Psychiatric Institute. The following year, 1920, he died suddenly of an acute infection.

In retrospect, Southard's main achievements were those of an educator. Because of his untimely death, it has been properly said, "He flashed across the psychiatric sky like a comet." Perhaps his very versatility prevented him from accomplishments in psychiatry as great as the magnitude of his genius. Probably aware of this situation, Southard once said laughingly but, perhaps, also sadly of himself, "Among psychologists I am known as a chess player . . .; among psychiatrists I am known as an anatomist; among philosophers I am known as a psychologist; and among clinicians as a neuropathologist."

Thomas W. Salmon was born in Lansingburgh, near Troy, N.Y. By the time he was graduated from Albany Medical College in 1899, he was attracted to two different subjects, bacteriology and psychiatry. Appointed bacteriologist to the Willard State Hospital in Ovid, N.Y., he was influenced by Dr. William L. Russell, then one of the leaders in psychiatry. In 1907, 4 years after joining the United States Public Health Service, Salmon was put in charge of the psychiatric evaluation of immigrants arriving at Ellis Island, N.Y. There he attempted to introduce a valid psychiatric examination for large numbers of people (more than 1 million in 1907 alone). In 1911, after a 4-year period at the Marine Hospital in Chelsea, Mass., Salmon was granted a leave of absence to serve as chief medical examiner of the Board of Alienists for the New York State Commission on Lunacy. In this job he made the first graphic statistical charts for state hospital populations and worked very hard toward improving the immigration laws.

By 1911 the movement for mental hygiene was rapidly spreading in the United States, following the publication of *A Mind That Found Itself* by Clifford Beers in 1908 and the establishment of the National Committee for Mental Hygiene. With the help of a grant from Mr. Henry Phipps and, later, from the Rockefeller Foundation, Dr. Salmon was named first medical director of the National Committee for Mental Hygiene in 1912. By 1914 he was engaged in an attack on the problems of mental deficiency with the help of the State Charities Aid Association. In 1917, at Dr. Salmon's suggestion, the magazine *Mental Hygiene* was started under the editorship of Dr. Frankwood E. Williams, who was the assistant medical director of the committee.

By the outbreak of the war in 1917, the National Committee for Mental Hygiene had devised a plan for establishing a central psychiatric unit for the military expedition, for excluding all unstable individuals from military service, and, in general, for involving psychiatrists in the military campaign. On his arrival in France at the end of 1917, Maj. Salmon plunged into his work as director of psychiatry for the American Expeditionary Force. He worked toward the training of competent psychiatric professionals and the organization of a camp hospital exclusively for the treatment of neuroses. Rejecting the loose term "shell shock," Salmon established guidelines for the early detection of neuroses and psychoses and began to plan for the return to the United States of the many psychiatric casualties. At the end of the war, Salmon helped write volume 10 of the *Report of the Medical Services in the World War*.

After his return to the United States at the end of the war, Salmon worked hard to develop plans for hospitalizing mentally disabled veterans as special consultant in neuropsychiatry to the Surgeon General. This work resulted in the organization of the Veterans' Bureau in 1921. In 1922 Salmon resigned from the National Committee for Mental Hygiene and accepted a professorship of psychiatry at Columbia University. There he became involved in establishing a program of preventive psychiatry, mainly through the opening of child guidance clinics in various cities with the help of the Commonwealth Fund, and, later, by organizing the New York State Psychiatric Institute, which opened in 1929 on the grounds of the Columbia Medical Center. Among the honors Salmon achieved was the Presidency of APA in 1923–1924, the U.S. Army's Distinguished Service Medal, and promotion to Brigadier General in the Medical Officers Reserve Corps. Salmon died in 1927 at the age of 51 in a sailing accident. Since then a Thomas William Salmon Memorial Lecture has been given annually in New York City under the sponsorship of the National Academy of Medicine.

Clifford Beers was born to a distinguished family in New Haven, Conn. After his graduation from Yale in 1897 he entered a business career, but 3 years later he succumbed to mental illness. Spared from a suicide attempt, Beers spent the next 3 years in different mental institutions: a private profit-making asylum, a private non-profit-making asylum, and, finally, a state hospital. In all three institutions he experienced harsh treatment from ignorant attendants and disinterest on the part of professional staff. Clinically, he suffered from delusions of persecution and self-reference, followed by a period of profound depression, which, in turn, gave way to a state of extreme exaltation. While in this last state he developed the idea of starting a worldwide movement for the protection of the insane.

Emerging as a newly cured man in 1903, Beers decid-

ed that a book not unlike *Uncle Tom's Cabin* that recounted his personal experience might best help the cause of the mentally ill. He therefore wrote the highly successful *A Mind That Found Itself*, which was composed in a frantic way between 1905 and 1907 and has been reprinted uninterruptedly since 1908. Beers received the enthusiastic support of William James and Adolf Meyer in this endeavor. Essentially, the book makes a plea for establishing a national society interested in improving the care and treatment of the mentally ill, for disseminating information concerning mental illness to all groups of people, and for encouraging research into the causes and outcome of mental illness.

Under the advice of William James and Adolf Meyer, who suggested the term "mental hygiene," Beers launched the Connecticut Society for Mental Hygiene in 1908 and the National Committee for Mental Hygiene in 1909. He was appointed permanent secretary of the national committee. In spite of two considerable difficulties from the beginning, i.e., the financial strain (which was eventually overcome with the help of John D. Rockefeller, Henry Phipps, and others) and the contrast between Beers's propagandistic emphasis and Meyer's scientific approach, the chief objects of the society eventually crystallized into working for the protection of the mental health of the public, raising standards for the care of the mentally ill, promoting the study of mental disorders, disseminating this information, obtaining reliable data in regard to mental disorders, and coordinating efforts with the federal government and with state organizations.

With unrelenting energy, Clifford Beers guided the mental hygiene movement toward new fields, mainly the establishment of the Training School for Psychiatric Social Work in 1918 at Smith College, the development of the child guidance movement with the help of the Commonwealth Fund in 1922, the sponsoring of a psychiatric study of prisoners at Sing Sing Prison by Bernard Glueck in 1917, and the application of mental hygiene to problems of industry. In 1918 there were 17 state societies for mental hygiene in the United States; by 1935, there were more than 50 state and local societies. In 1930, at the first international congress on mental hygiene, held in Washington, D.C., and attended by more than 3,000 persons representing 50 countries, the International Committee on Mental Hygiene was founded. A second international congress on mental hygiene was held in Paris in 1937, and a third met in London in 1948. It was there that the World Federation for Mental Health was founded.

Beers died at Butler Hospital, Providence, R.I., in 1943.

Charles MacFie Campbell was born in Scotland. After graduating from the Medical School of Edinburgh Campbell practiced in Paris under Pierre Marie, in Heidelberg under Nissl, and in the United States under Adolf Meyer at the New York State Pathological Institute at Ward's Island, N.Y. Campbell eventually joined Dr. Meyer permanently, following him to Baltimore, where Campbell became associate director of the Henry Phipps Psychiatric Clinic and associate professor of psychiatry at the Johns Hopkins Medical School (1913–1920).

An excellent teacher, Campbell was named director of the departments of psychiatry of Harvard Medical School and the Boston Psychopathic Hospital after the death of E.E. Southard. In 1925 Campbell edited *Problems of Personality: Studies Presented to Dr. Morton Prince, Pioneer in American Psychopathology*. In 1934, he delivered the Salmon Lecture, "Destiny and Disease in Mental Disorders," which was published as a book the following year. In this book (1) Campbell emphasized emotional factors in the development of schizophrenia:

> The problem of the psychiatrist was . . . to get to grips with the actual dynamic situation, to reconstruct in detail the life history, with the attention to the sensitizing or conditioning influence of environmental factors, and with due appreciation of the nature of emotional disturbance, of substitutive and evasive reactions, of symbolic expressions, of the various modes of getting satisfaction for the complicated needs of the individual. (pp. 33, 34)

Elected President of APA in 1937, Campbell made a plea for the involvement of psychiatry in the prevention of war and the control of aggression at the international level in his Presidential Address on "Perspectives in Psychiatry." He died in 1943.

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Presence and Persistence of Depressive Symptoms in Patient and Community Populations

BY THOMAS J. CRAIG, M.D., M.P.H., AND PEARL A. VAN NATTA, M.A.

The authors used a questionnaire to assess presence and persistence of 16 depression-associated symptoms in two inpatient groups and a random community sample. Nondepressed inpatients were more likely than the community population to experience psychological symptoms of depression, but persistence of the symptoms was the same for both groups. In contrast, significantly more depressed patients than community respondents indicated presence for all but 2 symptoms and persistence for all but 1. Thus persistence of symptoms may be more specific to depression than mere presence.

INTEREST in the prevalence of psychiatric symptoms and mental illness in general populations has produced studies that document a relatively high frequency of symptoms in diverse settings. These reports suggest that, at any given time, a large proportion of the community is suffering from a psychiatric disorder (1–3). Most of these investigations used reports of presence or intensity of symptoms (4–6) as their measure of pathology, although duration of symptoms has recently been suggested as a more crucial factor in determining whether true illness exists (7). In addition, most of the studies used an overall score composed of an aggregation of symptoms, and many reports focused primarily on symptoms representative of general psychopathology rather than on a discrete syndrome such as depression. Thus, the power of the discrimination of the score is limited to a generalization like "neurotics" have more symptoms than "normals" (6).

This study estimates the presence and persistence of 16 symptoms considered to be characteristic of the depressive syndrome in a community sample and compares the results with those for inpatients of a psychiatric facility that serves the community. The specific question we investigated was, Which symptoms best discriminate by either their presence or their persistence among depressed inpatients, nondepressed inpatients, and community respondents?

METHOD

As part of the Community Mental Health Epidemiology Program, initiated by the Center for Epidemiologic Studies (CES) of the National Institute of Mental Health (NIMH) in 1971, an interview survey of the general population was carried out in Washington County, Md., in 1971–1973. Households were selected at random from the Washington County master list, and one respondent, age 18 or over, was randomly selected from each household for interview. The response rate was 80.5% (N=1,672). Details of the survey have been published elsewhere (8).

The questionnaire contained 435 items, grouped under 13 sections, and took approximately 45 minutes to complete—major emphasis was on depressed mood and related symptoms. One of the scales used was the

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The papers in this section are grouped around a specific topic. Publication here does not, however, imply that the Editor considers this material to constitute a comprehensive analysis of the topic.

CES-D, a self-administered depression scale of 20 items, most of which were taken from 1) the Zung Scale (9), 2) the Beck Scale (10), 3) the D scale of the Minnesota Multiphasic Personality Inventory, 4) Raskin's self-report rating of depression (11), and 5) a scale developed by Gardner for use in population surveys (12). The score developed for the CES-D has a potential range of 0–60 and is the summation of the scaled responses. The weightings were as follows: 0, if the person reported no days with the symptom; 1, if the symptom lasted 1–2 days; 2, if 3–4 days; and 3, if 5–7 days. For the purposes of this paper, each symptom is considered separately as it was reported in terms of its presence (weights 1–3) and persistence (weight 3) over the week preceding the interview.

In addition to the community survey, the same questionnaire was given to 65 inpatients, aged 18–75 years, at a private psychiatric hospital serving Washington County. One of the interviewers from the community survey administered all the hospital interviews. A previous report found no significant difference between the mean CES-D scores of respondents from the general population interviewed by this interviewer and those of the respondents interviewed by the other community interviewers (8). The head nurse selected subjects on the basis of their ability to cooperate with the study, and the nurse-clinician assigned to the patient's therapy team rated him/her for depression on a scale described by Rockliff (13). The patients were interviewed immediately thereafter.

We use "presence" of a symptom to refer to a respondent's report of having experienced the symptom for 1–7 days during the week preceding the interview. "Persistence" of a symptom refers to the respondent's report of having experienced the symptom for 5–7 days during the week preceding the interview. The judgment of whether a patient was depressed or nondepressed was based on the nurse-clinician's rating of each patient's behavior on the Rockliff depression rating scale (13). The score for the Rockliff scale has a range of 0–30 and is a summation of ratings on each of 10 items. A person is given a rating of 0–3 on each item, indicating degrees of depressive symptoms from none to severe.

Each of the 30 depressed patients had a rating of 6 or more. The 15 nondepressed patients were rated 0–3; none earned a rating higher than 1 on any individual item. This is a more stringent definition of depression than that suggested by Rockliff and excludes patients whose ratings were 4 or 5. Also excluded were 12 schizophrenic patients who showed no reliable correlation of interview scores with nurses' ratings (14). The criterion of depression is thus based on symptoms, not on diagnosis, and may be considered more analogous to the depressive syndrome than to depression as a disease (15).

Since presence of a depressive symptom could not be ascertained for 4 of the 20 items of the CES-D scale because of the grouping of choices available to the respondent, we did not analyze these nondepressive items. We did not take race into account, since only 2% of the community respondents and none of the patients were black.

Percentages were adjusted to control for the effects of four demographic variables—age, sex, marital status, and education—by means of a binary variable multiple regression procedure developed by Feldstein (16) and modified by Dr. H. Abbey and Dr. J. A. Tonascia of the Department of Biostatistics, Johns Hopkins School of Hygiene and Public Health. This procedure requires a valid response for each of the 4 demographic variables and for each of the 16 CES-D items. Fifty-eight community respondents had incomplete responses, leaving 1,614 people in the analysis.

We assessed the significance of differences between inpatients and community residents by assigning confidence limits for each percentage (17, table 41). When the confidence intervals did not overlap, the two percentages were judged to be significantly different ($p \leqq .05$).

RESULTS

The adjustments to control for the 4 demographic variables resulted in very small changes in the percentages. The greatest absolute change was 3.6%, and most changes were within 6% of the unadjusted value.

Table 1 shows the adjusted percentages of community respondents and inpatients reporting the presence and persistence of the 16 symptoms of depression. A strikingly high percentage of both the community respondents and the nondepressed patients reported presence of 4 of 5 physiological symptoms. However, the percentage of depressed patients reporting presence of each of the 5 physiological symptoms was significantly higher than the community respondents. Among the 11 psychological symptoms of depression, all but 2 ("bothered by things" and "people were unfriendly") were significantly more common in the depressed patient group than the community group and 5 were reported by over 70% of the depressed patients. The psychological symptoms were generally less common among community respondents than the physiological symptoms; only 2 symptoms ("felt depressed" and "bothered by things") were reported by more than 30% of the respondents. In contrast to the physiological symptoms, the nondepressed patients reported 6 of the 11 psychological symptoms significantly more frequently than the community respondents and, for these symptoms, approached the rates of the depressed patients.

When persistence of symptoms for 5–7 days in the previous week is considered, a symptom-by-symptom comparison shows that the values for nondepressed patients are virtually identical with those for the community sample, whereas the values for the depressed patients are significantly higher than the community for all symptoms except "people were unfriendly."

TABLE 1
Community Respondents and Depressed and Nondepressed Inpatients Reporting the Presence and Persistence of 16 Symptoms of Depression, in Percents

Symptoms	Community Respondents (N=1,614)		Nondepressed Inpatients (N=15)		Depressed Inpatients (N=30)	
	Presence	Persistence	Presence	Persistence	Presence	Persistence
Physiological						
Had poor appetite	24	7	14	2	50*	34*
Had trouble concentrating	39	7	50	0	84*	57*
Couldn't get going	38	7	31	1	77*	34*
Felt everything an effort	47	18	59	16	88*	60*
Restless sleep	44	12	53	9	76*	35*
Psychological						
Talked less than usual	25	4	38	0	62*	31*
Felt like a failure	11	2	40*	0	59*	27*
Felt fearful	15	2	45*	7	72*	30*
Couldn't shake off blues	21	4	25	1	85*	40*
Felt people disliked me	12	1	26	0	56*	20*
Felt depressed	36	6	65*	7	88*	51*
Felt lonely	24	5	59*	1	84*	38*
Had crying spells	11	1	53*	0	47*	20*
Felt sad	29	4	58*	1	80*	40*
Bothered by things	37	5	64	7	47	30*
People were unfriendly	12	2	11	0	20	7

*This percentage is significantly different ($p<.05$) from the percentage of community respondents reporting this symptom.

Persistence of 5 of the 16 symptoms for 5–7 days was reported by 40% or more of the depressed patients.

DISCUSSION

One limitation of our data is that the patient groups were not randomly selected. The community group is a random sample, however, and comparisons among the groups can be made at a level of confidence that would hold if each patient group were a randomly selected group of the same size. The adjustment for the four major demographic variables removes some of the extraneous variation that can invalidate comparisons.

The data in table 1 confirm previous reports (7, 18, 19) of the relatively frequent occurrence of depressive symptoms among nondepressed inpatients and among community residents. However, the fact that the most frequently reported symptoms in the community group were concentrated in the physiological category (4 out of 5) suggests that the mere presence of these symptoms may be of relatively little value in the identification of significant levels of depression and that they may be associated with other conditions. The significantly more common presence of these 4 symptoms in the depressed group suggests that the depressive syndrome rarely occurs in the absence of these symptoms.

The data in table 1 suggest that presence of 6 of the psychological symptoms ("felt life a failure," "felt fearful," "felt depressed," "felt lonely," "had crying spells," and "felt sad") may be more indicative of general psychopathology than specific for depression. The presence percentages of these symptoms did not differ significantly between the two inpatient groups, but both inpatient groups had significantly higher presence percentages than the community sample. Furthermore, it seems that it is primarily the presence of these symptoms rather than their persistence that differentiates the nondepressed inpatients from the community population. In other words, nondepressed patients are more likely than the general population to have experienced these psychological symptoms of depression (but not the physiological ones) at some time during the week before the interview, but these symptoms have not been any more persistent than those experienced by the community respondents.

All symptoms except "people were unfriendly" were significantly more persistent among the depressed patients than the community respondents, while the latter had rates almost identical with the nondepressed patients. Therefore, the persistence of any of these symptoms for 5–7 days might be considered suggestive evidence for the presence of the depressive syndrome. This is especially so since it is assumed that a certain proportion of the community respondents, perhaps as many as 5–15% (19), were also depressed at the time of the survey and probably contributed to the percentage of community respondents reporting persistent symptoms. In particular, 3 symptoms, ("had trouble concentrating," "felt everything an effort," and "felt depressed") were reported to have persisted for 5–7 days by over 50% of the depressed patients and may be considered to be relatively necessary indicators of the depressive syndrome.

Two symptoms, ("bothered by things" and "people were unfriendly") were no more common among

the depressed or nondepressed patients than among the community respondents, and the symptom "people were unfriendly" was equally nonpersistent in all three groups; this finding suggests that neither of these symptoms contributes significantly to the overall assessment of depression or indicates the presence of general psychopathology.

Our findings, then, support the suggestion of Dohrenwend and Crandall (7) that evidence bearing on the duration and persistence of symptoms may be more significant than "sheer numbers of symptoms" in any assessment of depressive symptoms in patient or community groups.

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Psychiatric Disturbances of Aged Patients in Skilled Nursing Homes

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The authors found that 85% of 74 patients supported by Medicaid in two skilled nursing facilities had significant psychiatric disorders in addition to serious multiple medical illnesses. Almost two-thirds of the psychiatric disturbances had not been diagnosed. Although staff were more concerned with the psychosocial than the physical aspects of patients' problems in more than half of the cases, they often had difficulty recognizing the legitimacy of psychological complaints and relating to patients with psychological disturbances. Staff were not clear about the orders for psychotropic medications that were prescribed for more than half of the patients. The authors point out that more psychiatric consultation is needed to ensure appropriate and effective care for psychiatric patients in such facilities.

NURSING HOMES have become important sites for the care of psychiatrically impaired elderly individuals, apparently because of underutilization of outpatient facilities by the elderly (1, 2) and a trend in many states to reduce admissions of older patients to state mental hospitals (3). Thus the nursing home has inherited the psychiatrically ill older patient by default.

As early as 1962, Goldfarb (4) reported that 87% of patients in nursing homes had chronic brain syndrome. Redick and associates (3), quoting a recent report by the National Center for Health Statistics (5), noted that 53% (N=214,203) of patients over 65 in nursing homes in 1964 had psychiatric disorders. Redick and associates also noted that statistics on the prevalence of psychiatric disturbances in nursing homes were incomplete for more recent years.

Stotsky (6) reported that "on the whole, placement of psychiatric patients in nursing homes has been successful" but that this success depended on adequate screening, sensible treatment programs, and aftercare support by referring psychiatric facilities. Problems arise, however, when there is a lack of information from the referring facility (7).

Yudin and associates (8) found inadequate medical records in nursing homes and noted a need for more psychiatric consultation. Butler (9) believes that nursing homes are out of the mainstream of psychiatry and that psychiatrists are rarely available for consultation.

Our research was designed to shed light on 1) the current prevalence and nature of psychiatric disturbances of patients supported by Medicaid in proprietary skilled nursing facilities, 2) the quality of medical records in general and psychiatric records in particular, 3) staff attitudes toward patients, particularly those with psychiatric disturbances, 4) the nature and frequency of visits by significant others, and 5) the relationship of variables 2–4 to the nature and severity of the patient's condition.

METHOD

Two proprietary nursing homes in a midwest metropolitan area were selected for study. The homes were matched for average age of patients, average length of stay, socioeconomic level of patients, distribution of patients by sex, and percentage of Medicaid patients. The two homes had a total of 251 Medicaid patients in skilled nursing care. A random sample of 100 patients was selected. Of these, 26 were lost by attrition (8 died, 10 refused to participate in the study, 5 were transferred to other facilities, and 3 were under age 65). The remaining 74 patients were the subjects of intensive study. All patients, informants, and staff participants were requested to sign consent forms, and all refusals were respected.

Data-collection procedures were as follows:

1. Each patient was given a semi-structured interview protocol that included the short mental status questionnaire developed by Pfeiffer (10). The questionnaire, which contains 10 items that test memory and orientation, was scored as follows: 0–2 errors = intact intellectual function, 3–4 errors = mild impairment, 5–7 errors = moderate impairment, and 8–10 errors = severe impairment.
2. A responsible relative or significant informant of each patient was also given a semi-structured interview.

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3. Nursing home personnel, including licensed staff and nursing assistants directly responsible for patient care, were interviewed regarding each subject.

4. Individual medical records were reviewed, assessed, and rated to determine diagnoses, therapies, course of treatment, and overall adequacy of the record.

5. Administrative and supervisory personnel were interviewed to determine overall organizational structure, personnel policies, philosophy of care, and implementation of procedures to assure quality of care.

6. Observational data were obtained on patient-staff interactions, staff relationships, ambience of residence, and stimulation and attractiveness of the physical environment.

One of the authors (R.B.T.), a social work clinician, conducted the interviews with patients, informants, and staff. Although this may have introduced the personal bias of the interviewer, any bias was assumed to be constant throughout the study. The medical chart review ratings and diagnostic classifications were determined by a psychiatrist (F.K.G.) and his assistant, a psychiatrist-in-training.

A primary psychiatric diagnosis (or a designation of "no psychiatric disorder") and one or more secondary diagnoses (if warranted) were made for each patient. Diagnoses were made only if there were clear and overt findings of sufficient magnitude to warrant a diagnostic label. For example, cognitive impairment thought to represent physiologic aging was not diagnosed as chronic brain syndrome. Similarly, unhappiness and dysphoria were not considered sufficient basis for a diagnosis of depression. Diagnoses were based on data from 1) interviews of patients, relatives, and staff; 2) direct observation of patients; and 3) medical records. A diagnosis was considered missed or incorrect when there was a disparity between the research psychiatrist's diagnosis and the data in the medical record.

RESULTS

Sample Characteristics

The mean age of the patients was 81.2 years, and the average age at admission to any nursing home was 79.3 years. Eighty percent were women, 91% were white, and 76% were in a nursing home for the first time.

The patients had many general medical problems—the average number of medical diagnoses per patient was 4.7. Fifty-nine patients (80%) had a diagnosis of cardiovascular disease, and 29 patients (39%) had a neurological disorder. A mean of 6.9 medications was prescribed per patient.

Thirty-two percent of the patients had histories of significant mental or emotional disorders. Of these, 21% had schizophrenic disorders, 33% had depressive disorders, and 17% had problems related to alcoholism. (These diagnoses were reconstructed from interview data and existing records.) Of those with a history of mental or emotional illness, over half had not received medical treatment for the previous condition.

TABLE 1
Distribution of Psychiatric Disorder, Cognitive Impairment, and Missed or Incorrect Diagnoses in 74 Nursing Home Patients

Item	Number	Percent
Psychiatric disorder	63	85.0
Chronic brain syndrome	34	45.9
Depression	19	25.6
Other	10	13.5
Missed psychiatric diagnosis	45	60.8
Incorrect psychiatric diagnosis	5	6.7
Moderate or severe cognitive impairment	44	59.4

Psychiatric Diagnoses

Sixty-three patients (85%) were given a primary psychiatric diagnosis. Of these, 34 had chronic brain syndrome, 10 without psychosis and 24 with psychosis. Thus 46% of the total sample of 74 patients had a primary diagnosis of chronic brain syndrome. Sixteen patients were given a primary diagnosis of depressive neurosis and 3 patients were diagnosed as having psychotic depression. The distribution of other primary diagnoses was as follows: schizophrenia, N=5; paranoid psychosis, N=2; anxiety neurosis, N=1; and personality disorder, N=2.

Thirty-nine patients (52.7%) were given a secondary psychiatric diagnosis and 5 patients were given 2 secondary diagnoses. The distribution of the 44 secondary psychiatric diagnoses was as follows: chronic brain syndrome, N=13; depression, N=18; schizophrenia, N=2; chronic alcoholism, N=5; and personality disorder, N=6.

When primary and secondary psychiatric diagnoses were considered in the aggregate, 47 patients (63.5%) showed chronic brain syndrome, 37 patients (50%) had depression, 9 patients (12.2%) showed schizophrenic or paranoid psychoses, and 5 patients (all men) had histories of serious alcoholism.

Missed and Incorrect Psychiatric Diagnoses

As table 1 shows, in 61% of the subjects (N=45) one or more psychiatric diagnoses were missed. One psychiatric diagnosis was missed in 22 of these patients and 2 in 23 patients. Missed diagnoses were as follows: depression, N=34; schizophrenia, N=5; chronic brain syndrome, N=13; and other, N=15.

Incorrect diagnoses occurred in only 5 cases. In 4 of these, the patient was diagnosed as having chronic brain syndrome, but the research team did not believe that this diagnosis was warranted.

Serious Diagnoses

By definition, patients in skilled nursing care are seriously ill. Our data highlight the severity of their condition and the complexity involved in their care due to the existence of multiple, serious diseases. "Serious

diagnoses" include both general medical and psychiatric disorders. If the condition was life threatening (e.g., cancer, severe heart disease, or severe chronic brain syndrome) or if it caused serious impairment (e.g., schizophrenia, advanced arthritis), it was labeled serious. Conditions such as mild hearing loss, less severe depressions, hernia, etc., were not so labeled. The research physician (F.K.G.) determined the number of serious diagnoses for each patient based on data from interviews and medical records. Patients had a range of 1–5 serious medical diagnoses, with a mean of 2.28. Thirty patients had 3 or more serious diagnoses, which invariably meant that their physical status and general medical situation was very grave.

Mental Status Questionnaire

On the mental status questionnaire, 16 patients showed intact intellectual function, 14 patients showed mild impairment, 12 patients showed moderate impairment, and 32 patients showed severe impairment. Thus almost 60% of the patients showed moderate to severe cognitive impairment, and 78% of the patients had some degree of cognitive impairment.

Use of Psychotropic Medication

Several important aspects of the use of the psychotropic medications in nursing homes emerged from this study. Forty-one patients (55.4%) received some kind of psychotropic medication—major and minor tranquilizers were used most often, with occasional use of antidepressants, vascular dilators, and cerebral stimulants or enhancers of cerebral metabolism. Psychotropic medications were prescribed on a regular daily basis for only 13 patients (17.6%). For 30 patients these medications were prescribed on an as-needed basis and the orders rarely gave the nursing staff a clear indication of the circumstances under which the medication was to be given.

For 11 patients, physicians ordered more than one medication in a particular class of medications (e.g., analgesics, hypnotics, or tranquilizers). These were as-needed orders without clear indications of the sequence or circumstances for giving the medication or of whether more than one was to be used. Nursing notes rarely documented the reason for the use of such medications and nurses generally expressed a lack of confidence in their understanding of the basis for giving the medications prescribed, particularly the tranquilizers.

Nurses' and Physicians' Notes

In 7 cases nursing notes were written every other day or more frequently. Notes were recorded less than every other day but at least once a week in 51 cases and less than once a week in 16 cases. In 44 cases, physicians made notes at least once a month (notes were rarely made more than once a month). Notes were made at least once every other month but less than once a month for 22 patients and less than every other month for 8 patients.

Adequacy and Correctness of Medical Records

The research physician subjectively rated records on a scale of 10–50 (10 = very poor, 50 = excellent) in terms of adequacy and correctness of records and diagnoses. Eight records were rated as excellent overall, 17 as good, 22 as fair, 17 as poor, and 10 very poor. Thus, over a third of the records were considered poor or very poor. Correctness of psychiatric diagnoses was rated good in 8 cases, fair in 21 cases, poor in 28 cases, and very poor in 11 cases (6 cases were not rated in this regard). Thus slightly more than half of the psychiatric records were rated poor or very poor.

Staff Attitudes

The first attitudinal variable investigated was the major concern of staff regarding each patient's current status. We found that staff were primarily concerned with patients' physical problems in 34 cases and with psychosocial aspects in 40 cases. The two other variables were rated by one of the authors (R.B.T.) on the basis of interview and observational data. Ratings ranged from 1 to 5, with 5 being most favorable.

Ratings of staff attitudes toward the legitimacy of a patient's complaints were distributed as follows: extremely positive, N=11; fairly positive, N=29; neutral, N=17; fairly negative, N=16; and extremely negative, N=1. Staff interactions with patients were considered very positive (i.e., appropriate and without infantilization) for 3 patients, positive for 26 patients, neutral for 10 patients, somewhat negative for 28 patients, and very negative for 7 patients. Again, in almost half of the cases, the staff showed negative or inappropriate attitudes (characterized in most cases by hostility and/or infantilization) toward their patients.

Informants

Extensive interview data were obtained from an informant, the most significant other person in the patient's life at that time who was capable of providing the desired information. Two informants were spouses, 34 were offspring, 34 were other relatives, and 4 were close friends of the patient.

The nature and frequency of visits by the informant varied considerably. The overall mean number of visits per month was 6.35; 7 informants visited less than once a month and 3 visited daily. Over two-thirds of the informants visited at least once a week. Half only visited, whereas the other half also did some personal things for the patient (e.g., grooming of hair).

Impact of Clinical Factors on Other Variables

Patients were divided into subgroups on 6 clinical classifications—type of psychiatric diagnosis, number of serious diagnoses, mental status score, area of major staff concern, use of psychotropic medications, and number of missed diagnoses. We then compared the subgroups' mean scores on the following variables: staff view of legitimacy of patients' complaints, appropriateness of staff-patient relationships, frequency of

TABLE 2
Means of Five Variables by Subclassifications

Classification	N	Variable: Staff View of Legitimacy of Complaints*	Staff-Patient Relationship**	Informant Visits per Month	Physicians' Notes per Year	Nurses' Notes per Year
Psychiatric diagnosis						
None (N)	11	4.73	3.82	9.45	9.09	6.09
Psychogenic only (P)	16	3.34	3.31	5.00	10.0	9.31
Organic (O)	47	2.87	2.49	6.09	9.4	9.06
Significance						
N versus P		p<.01	n.s.	n.s.	n.s.	n.s.
P versus O		n.s.	p<.05	n.s.	n.s.	n.s.
N versus O		p<.01	p<.01	n.s.	n.s.	n.s.
Number of serious diagnoses						
1-2	44	3.57	3.14	7.09	8.84	7.32
3 or more	30	3.30	2.47	5.27	10.43	10.67
Significance		n.s.	p<.01	n.s.	p<.05	p<.01
Mental status score						
0-5	34	3.57	3.49	6.14	9.23	7.97
6-10	40	3.33	2.31	6.54	9.72	9.31
Significance		n.s.	p<.01	n.s.	n.s.	n.s.
Major staff concern						
Physical	34	3.94	3.53	7.24	8.97	7.68
Psychosocial	40	3.02	2.30	5.60	9.93	9.52
Significance		p<.01	p<.01	n.s.	n.s.	n.s.

*Rated on a scale of 1–5 (1=least legitimate, 5=most legitimate).
**Rated on a scale of 1–5 (1=most negative, 5=most positive).

informants' visits, physicians' notes per year, and nurses' notes per year. Table 2 presents the means for the first 5 variables listed and the statistical significance as determined by univariate analyses of variance.

As table 2 indicates, staff were more positive toward complaints of patients with no psychiatric disorders than those with psychogenic or organic psychiatric disorders. Staff were also significantly more positive in their attitudes toward patients' complaints and their interactions with patients when their concern was primarily with the patient's physical status. Staff relationships were more positive for patients with no psychiatric diagnosis or psychogenic diagnoses than those with organic psychiatric diagnoses. Furthermore, staff-patient relationships were more positive but physicians' and nurses' notes were less frequent for patients who had fewer than three serious diagnoses.

The only significant difference found in the comparison of patients with mental status scores of 5 or less and those with scores above 5 was that staff-patient interaction was more positive with patients who had less cognitive impairment. No significant differences were found in analyses based on use of psychotropic medication or number of missed diagnoses.

CONCLUSIONS

Our study documents the fact that over three-quarters of patients in skilled nursing homes have a diagnosable psychiatric condition, yet nursing personnel are uncomfortable with psychological disturbance in their patients and not well educated in most aspects of diagnosis and treatment of psychiatric conditions. At the same time, most physicians who attend nursing homes do not maintain adequate psychiatric records, use psychotropic drugs in an optimal way, or respond to worsening psychiatric conditions with more frequent visits.

These conditions of care are unacceptable. They can be improved if psychiatrists would be willing to 1) become more involved as consultants to nursing homes, 2) involve themselves more with inservice training for nursing staffs and postgraduate training of physicians in nursing homes, and 3) advocate and participate in increased emphasis on geriatric psychiatry in the curricula of all health science professional schools. Accomplishing these objectives is a challenge that psychiatrists can no longer ignore.

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Clinical Depression Among Narcotic Addicts Maintained on Methadone in the Community

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In a study of 106 predominantly young, lower-social-class men participating in a methadone maintenance program, the authors found that about one-third were moderately to severely depressed as assessed on standard rating scales of depression. The depressive symptoms were associated with a decrease in social functioning, increase in stress in the past 6 months, and a history of alcohol abuse. Because the combination of depression and drug addiction creates a high risk for suicide, depressive symptoms require early detection and treatment. The authors point to the need for more research on treatment approaches, particularly the use of psychotropic drugs.

THE PRESENCE of depressive symptoms in opiate-addicted individuals has received clinical mention (1–3) but little systematic study. This lack of attention may be due to the fact that depression in these patients presents both diagnostic and treatment problems. Diagnostically, it may be difficult to differentiate the symptoms of depression from the side effects of opiate use or withdrawal. This is particularly a problem when the addict is being maintained on the synthetic opiate methadone hydrochloride during treatment. Even if this differentiation can be made, there is no consensus as to how to treat secondary depression in a patient with another, primary psychiatric problem.

Interest in depression in the individual receiving methadone maintenance treatment for opiate addiction is more than academic since the presence of depressive symptoms can contribute to the use of compensatory outlets, to higher attrition, and to difficulty in discontinuing methadone. For example, in a conversation Kleber noted that the depressed methadone patients enrolled in the New Haven Connecticut Mental Health Center Methadone Maintenance Program overuse alcohol and other drugs and overeat or chain-smoke and that patients who develop depressive symptoms during detoxification from methadone have higher rates of attrition and failure.

Aside from a recently completed study by Senay (4), which included a survey of depressive symptoms in patients entering methadone maintenance treatment at the Illinois Drug Abuse Program, we could not find any formal studies on the subject. This paper will report the results of a survey that examined the frequency and nature of depressive symptoms and social functioning in a cohort of methadone-maintained patients. This is the first report of an ongoing

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longitudinal study in which we will examine the course of the symptoms as part of an effort to develop treatment strategies for subgroups of drug-addicted individuals.

METHOD

Methadone Program

The Methadone Maintenance Clinic of the Drug Dependence Unit, Connecticut Mental Health Center—Yale University was founded in 1968 for the purpose of rehabilitating hard-core addicts. The program consists of methadone maintenance on an outpatient basis used in conjunction with a variety of psychosocial supports and with high patient involvement in running the program (5, 6). Patients are usually either self-referred or referred from the courts or parole board. There are over 150 new admissions per year, and about 325 patients are in treatment in any 1 year. To be eligible for methadone maintenance a patient must have a history of at least 2 years of addiction to an opiate. About one-third of the patients have histories of more than 5 years' addiction.

Sample

The sample was selected from the Methadone Maintenance Clinic. The 106 patients selected included 62 consecutive first admissions and 44 patients who had been in maintenance treatment for an average of 1 year. All patients included in the study had agreed to participate after the nature of the procedure was fully explained to them and had signed consent forms before the interview. Since the differences in sociodemographic and clinical characteristics between the 2 patient groups were within chance expectation, the data from both samples have been combined.

Assessment

Basic sociodemographic, psychiatric, and drug history information was collected. Clinical status was assessed by clinician's rating and by patient self-report. Clinician rating included the Raskin Depression Scale (7) and the Hamilton Rating Scale for Depression (8). Self-report data were collected on the Hopkins Symptom Checklist (9). Social functioning over the past 2 months was assessed on the Social Adjustment Scale (10). A semistructured interview was used to obtain information on the occurrence of 61 life events, spanning a wide range of experiences in the past 6 months (11). All instruments were selected because of their prior use with depressed outpatients, and they were pretested in an addict population before the beginning of the survey to determine their suitability for this population.

A master's-degree level rater who had considerable experience with nonaddicted depressed outpatients conducted all of the interviews. She underwent a period of training and testing for interrater reliability with a psychiatrist and received training in interviewing drug addicted individuals before undertaking the formal survey.

RESULTS

Sociodemographic Characteristics

The patients were predominantly young (mean age=27), male (75%), white (53%), Catholic (49%), and from the lower social classes (81%) (12). Thirty-three percent were single and 30% were currently married; 54% had children. Most of the patients lived with a family member; only 15% lived alone. Geographic mobility was high: only 19% had lived at their present address for more than 2 years. Only 25% were in full-time employment. Educational level varied; 17% had had some college but 57% had not completed high school. Seventy-five percent of the patients came from a family headed by the father, and almost all of the patients (95%) were born in the United States. In sociodemographic characteristics, these patients were similar to the rest of the methadone clinic population.

Family and Patient Psychiatric History

A substantial number of the patients (64%) reported a history of mental illness in their parents or siblings, usually depression in the mother (14%) or alcoholism in the father (12%). Fifty-four percent of the patients themselves had had psychiatric treatment in the past, and of this group, 24% reported that they had received treatment before their addiction problem. Forty percent of the patients reported excessive alcohol abuse in the past.

Symptom Status

Table 1 illustrates the patients' degree of overall depressive symptoms based on the Raskin Depression Scale, which measures the patient's verbal report, behavior, and secondary symptoms of depression. A score of 7 or higher is usually considered to indicate depression of sufficient intensity to require antidepressant medication and is a criterion used for patients' admission to many clinical trials of antidepressant agents. According to the Raskin criteria, 32% of the patients were clinically depressed.

Comparison of Depressed and Nondepressed Patients

Social history. We next compared the sociodemographic and historical characteristics of the 34 depressed patients (scores of 7–12 on the Raskin scale) and the 72 nondepressed patients (scores of less than 7 on the Raskin scale). There were no significant differences in any of the variables, with the exception of alcohol use. The depressed methadone patients more frequently had a history of alcohol abuse ($p<.05$, chi-square test for categorical variables and t test for continuous variables). It is interesting that the 2 groups

TABLE 1
Degree of Overall Depressive Symptoms in 106 Methadone Patients

Raskin Depression Scale Score*	Patients N	Patients %
3–4 (asymptomatic)	38	36
5–6 (borderline)	34	32
7–8 (mild–moderate)	20	19
Over 8 (severe)	14	13

*The scale range is 3–15. The actual range for these patients was 3–12.

TABLE 2
Symptom Pattern Scores for 72 Nondepressed and 34 Depressed Methadone Patients

Item	Nondepressed Group Mean	Nondepressed Group SD	Depressed Group Mean	Depressed Group SD
Clinician rating (Hamilton scale)				
Depressed mood	0.57	0.85	2.56*	1.03
Feelings of guilt	1.15	0.95	1.59**	1.14
Suicide	0.09	0.41	0.91*	0.27
Insomnia early	0.18	0.51	0.91*	0.82
Insomnia middle	0.36	0.71	1.06*	0.91
Insomnia late	0.11	0.39	0.27	0.66
Work and activities	1.24	1.31	2.27*	1.22
Retardation	0.17	0.44	0.50***	0.78
Agitation	0.32	0.50	0.38	0.60
Anxiety—psychic	1.33	1.14	2.15*	0.88
Anxiety—somatic	0.88	0.94	1.62*	0.94
Somatic symptoms—gastrointestinal	0.85	0.84	1.09	0.82
Somatic symptoms—general	0.83	0.85	1.41***	0.81
Genital symptoms	0.64	0.66	1.00**	0.82
Hypochondriasis	0.60	0.99	1.44*	1.27
Loss of weight	0.40	0.72	0.79**	0.93
Insight	0.72	0.80	0.29**	0.62
Diurnal variation	0.60	0.74	1.21*	0.83
Depersonalization and derealization	0.11	0.31	0.77*	0.94
Paranoid symptoms	0.44	0.71	0.88**	0.96
Obsessional and compulsive symptoms	0.43	0.60	1.00*	0.73
Total score	11.25	5.49	23.68*	6.22
Patient self-rating (Hopkins Symptom Checklist)				
Somatization	0.49	0.47	0.95*	0.68
Obsessive-compulsive	0.61	0.56	1.33*	0.67
Interpersonal sensitivity	0.57	0.60	1.25*	0.68
Depression	0.59	0.53	1.53*	0.78
Anxiety	0.42	0.46	1.03*	0.54
Anger-hostility	0.46	0.54	0.96*	0.64
Phobic anxiety	0.21	0.35	0.56*	0.67
Paranoid ideation	0.72	0.68	1.26*	0.71
Psychoticism	0.28	0.38	0.76*	0.52
Global symptom index	0.50	0.42	1.12*	0.51
Total of symptoms	44.57	37.40	100.94*	45.80

*p<.001, t test.
**p<.05, t test.
***p<.01, t test.

TABLE 3
Social Role Functioning Scores for 72 Nondepressed and 34 Depressed Methadone Patients*

Social Adjustment Scale Item	Nondepressed Group N	Nondepressed Group Mean	Nondepressed Group SD	Depressed Group N	Depressed Group Mean	Depressed Group SD
Work	42	1.76	.56	18	2.07	.60
Social and leisure	70	1.87	.42	33	2.57**	.71
Extended family	71	1.78	.44	33	2.09**	.41
Marital	37	1.80	.47	14	2.00	.37
Parental	23	1.41	.37	12	1.63	.60
Family unit	54	1.76	.53	24	2.42**	.82
Overall adjustment	71	1.86	.34	33	2.33**	.37

*The scale range is 1–5, with higher scores indicating more impairment.
**p<.001, t test.

did not differ on duration of heroin abuse or on type of drug used.

Clinical symptoms. Table 2 compares the depressed and nondepressed patients on clinical symptoms as judged by the clinician and by the patient's self-report. As can be seen, the patients meeting the Raskin scale criteria for depression were significantly more symptomatic on most items. These findings were also reflected in their self-report ratings.

Social functioning. The depressed patients showed more impairment in social role functioning (see table 3). These differences failed to reach statistical significance in work, marital, and parental roles, in which a substantial number of methadone patients could not be rated.

Stress. We also examined differences between the depressed and nondepressed patients in life events during the previous 6 months. The depressed patients had experienced a significantly higher total number of events and perceived the events as more stressful ($p<.05$, t test).

The two individual events that had occurred significantly more frequently in the depressed patients were "major physical or emotional illness of family members not leading to death" (present in 41% of the depressed patients and only 15% of the nondepressed patients) and "increase in arguments with spouse" (21% and 6%, respectively) ($p<.05$, t test). The latter finding is of particular interest because it is the most powerful item that distinguished a depressed cohort from a community control group (11).

DISCUSSION

In our study of predominantly young, American-born, lower-social-class men who were drug addicts in a methadone maintenance program, we found that about one-third were moderately to severely depressed. Their symptoms included disturbance of

mood sleep, appetite, and sexual functioning, accompanied by anxiety and suicidal feelings. The depressive symptoms were associated with a decrease in social functioning, increase in stress in the past 6 months, and a history of alcohol abuse.

It is not possible to predict which population of drug addicts under treatment will be depressed; the presence of the depression in this sample was not related to the patients' sex, race, social, drug, or psychiatric history.

Is This Really Depression?

Drug addicts can present a special diagnostic challenge since depressive symptoms may be attributed to physiological symptoms of withdrawal or to the apathy or anomie of a deviant lifestyle. There may be a question as to whether the patients in this study were really clinically depressed or whether the depressive symptoms represented the consequence of being in a state of withdrawal from heroin or of being maintained on methadone.

In regard to the effects of withdrawal, disturbed sexual functioning, anxiety, and appetite disturbances have been reported in narcotic addicts who are being withdrawn (13, 14). However, this explanation seems unlikely for our group since the newly admitted patients were not in withdrawal and the remaining 40% were already stabilized on methadone when interviewed. Regarding the possibility that methadone itself produces symptoms, a recent report by Gritz and associates (15) indicated that methadone does not have noticeable physiological effects.

We feel the evidence suggests that these patients were indeed clinically depressed, for the following reasons. We used multiple criteria for diagnosing depression. Patients were only considered depressed if they met the criteria of verbal report, behavior, and secondary symptoms. They were not included if they only reported mood disturbance or only reported secondary symptoms without the disturbed affect. When the methadone patients who met the 3 criteria for depression on the Raskin Depression Scale were compared with those who did not, the depressed patients were judged by both the clinician and themselves as significantly more symptomatic and more socially impaired.

We found that approximately 30% of the patients met the criteria for depression, a figure quite close to the rate of 20%–25% that Senay (4) found among 190 patients who were entering the Illinois Drug Abuse Program and were assessed on the Beck Depression Inventory (15) and the Hamilton rating scale (8).

Further confirmatory evidence could come from a double-blind controlled clinical trial of tricyclic antidepressants versus placebo randomly assigned to determine if this subgroup of depressed addicts responded to active medication.

Secondary Depression and Its Treatment

Robins and Guze have attempted to reduce the heterogeneity of depression by distinguishing primary from secondary depression (17). To justify a diagnosis of depression a patient must first have a dysphoric mood, a predetermined number of somatic and psychological symptoms, and a definite onset. When a depression meets these criteria, its classification as primary or secondary depends mainly on chronology and the presence or absence of various other psychiatric disorders.

In our drug-addicted population it was difficult to determine if the depression preceded or followed the addiction. Given the long history and severity of their addiction, the depressed patients in this study would most likely be considered as having secondary depression. While the distinction between primary and secondary depression is useful for research purposes, the validity of this distinction still awaits further data from follow-up, family, and laboratory studies. Moreover, it is unclear if their treatments differ.

While there is good evidence that tricyclic antidepressants are effective in the treatment of the acute symptoms of primary depression, there is less clarity as to their value in treating secondary depression. In practice, primary and secondary depressions usually receive similar treatment, although this procedure is based on little experimental data. The absence of data in opiate-addicted patients is striking, since these patients are usually excluded from clinical trials of psychopharmacological agents.

In our review of the literature we found only one randomized, double-blind placebo-controlled trial of antidepressant agents in a homogeneous sample of depressed methadone-maintained subjects. Woody and associates (18) reported preliminary results from a 16-week placebo-controlled trial of doxepin in 35 methadone patients with some depressive symptoms. This was a pilot study and requires replication since only men were included and the sample was small. However, their data did show that patients receiving doxepin felt less depressed and also had a decrease in amphetamine abuse. No adverse reactions were found between doxepin and methadone.

While controlled psychopharmacological trials have been lacking, there have been a few open trials and clinical reports. Altamura (3) reported results from an open trail of lithium carbonate with 20 opiate addicts unselected for affective symptoms. Although the investigator felt that some patients reported a decreased psychological dependence on illicit drugs while receiving lithium carbonate, no conclusions could be drawn because of the study design and poor patient compliance. In a retrospective clinical study, Tislow (19) found that depressed patients in methadone programs responded favorably to psychotropic drugs, as evidenced by increased social and clinical well-being and reduced attrition and treatment failure. Kaufman and Blaine (20) noted that imipramine successfully alleviated depression in methadone patients but that results were not always consistent. This review of the available literature highlights the relative absence of research in this area.

CONCLUSIONS

Our findings, consistent with the reports of the Senay group in Chicago, indicate that a substantial minority of methadone maintained patients are clinically depressed as assessed on standard rating scales of depression. However, in generalizing the findings it should be stressed that the patients studied were predominantly young, white, and Catholic and, as such, may be different from typical opiate addicts, although not necessarily different from the sample of persons treated with methadone maintenance.

The combination of depression and drug addiction, which in this sample was frequently associated with alcohol abuse, creates a high risk for suicide. Because of this risk, depressive symptoms require early detection and special treatment in the addict population. Some evidence suggests that the reduction of the secondary symptoms of depression with psychotropic drugs may offer an additional therapeutic modality. Our treatment experience with primary depressives indicated that psychotropic drugs would need to be coupled with the usual rehabilitative psychotherapeutic approaches of drug treatment programs (21, 22).

However, the treatment of most secondary depressions requires considerably more attention, particularly to the testing of psychotropic drugs in controlled clinical trials. These data are especially lacking as guides to the treatment of the depressed opiate addicted patient.

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Rate of Psychiatric Morbidity in a Metropolitan County Jail Population

BY JOHN PETRICH, M.D.

The author describes social-psychiatric characteristics of 122 jail inmates examined while awaiting trial, 80% of them on felony charges. The estimated overall rate of psychiatric illness was 4.6%. The patient sample was significantly older and contained significantly more minority group men than the jail population as a whole. Thirty-six percent of the patients diagnosed as schizophrenic were arrested on misdemeanor charges. Drug dependency was diagnosed in 51% of the men but in only 15% of the women. Psychosis was diagnosed more frequently and alcoholism, anxiety neurosis, and antisocial personality less frequently than in studies of prison populations using similar diagnostic criteria.

LOCAL JAIL FACILITIES have been used since colonial times to confine mentally disordered persons (1). The incorporation of psychiatric treatment programs into metropolitan jails is relatively uncommon. In a 1973 study by the American Medical Association, only 13% of the nation's jails surveyed reported they had psychiatric services for mentally ill inmates (2). Yet law enforcement personnel (3) and jail medical staff (4) consider psychiatric illness to be the single major health problem among inmates in metropolitan jails.

A psychiatric consultant has been available to the King County Jail, Seattle, Wash., since July 1972 to provide in-jail psychiatric treatment and referral services to the inmates. This paper offers an estimate of the psychiatric morbidity in this jail and describes the characteristics of the inmates. It illustrates some important differences between the psychiatric morbidity of the jail population and that of other offender groups who have been studied. Unusual features of this study are the sampling of a modern metropolitan jail inmate population and the use of explicit diagnostic criteria that have been used with other offender populations, making limited comparisons possible. The data were compiled during a 5-month survey from September 1, 1973, through January 31, 1974.

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THE SETTING

The King County Jail provides detention facilities for all individuals jailed on felony charges in the county (population 1,100,000) and for those jailed on misdemeanor charges from the area of the county outside the Seattle city limits (approximately 600,000 people). A total of 6,510 men and women were booked into the King County Jail during the 1974 calendar year, the last year for which such data are available. The jail has a capacity of 525; the average daily census for 1973 was 271 inmates. Two-thirds of the inmates are held for an average of 30 days while awaiting trial, and one-third are held for an average of 120 days while serving sentences. The King County Jail provides adequate physical space and sanitary and kitchen facilities and is staffed by trained personnel with high morale.

Members of the King County Sheriff's Department are responsible for the administration and security operations of the jail facility. The Seattle King County Department of Public Health provided medical and psychiatric services to the jail on a contract basis.

The goals of the psychiatric consultant are to provide in-jail psychiatric treatment and referral services for inmates and ongoing psychiatric treatment for those inmate-patients who must remain in the jail for prolonged periods. The issues of legal sanity and competency to stand trial are not addressed; referrals regarding these matters continue to be directed to private practice psychiatrists.

METHOD

While no formal attempts were made to screen all inmates for psychiatric illness, all segments of the jail staff—custody officers, social service personnel, and medical staff—referred patients. These individuals had some daily contact with every jail inmate and were in a position to identify those with psychiatric illness. It was common for patients to be identified by the custody officers at the booking desk.

All referrals were screened by the same half-time psychiatrist (J.P.). Those patients not evaluated were judged to need no psychiatric evaluation or left the jail before they were examined. The psychiatrist administered a standardized interview format, which elicits data on demographic characteristics and drug, psychi-

atric, and criminal histories, and a standard diagnostic battery (5) to each patient examined. No attempts were made to verify inmates' criminal or psychiatric histories using court or hospital records.

For the purposes of this study, a "patient" is defined as any inmate who presented with a suspected psychiatric illness during the period of that particular booking in the jail. Patients who were released to the community and subsequently rearrested and rebooked during the study period and who required treatment again were counted as new patients. Patients who were treated and who experienced another episode of illness without having been released from jail were only counted once.

RESULTS

Patients Examined

In the 5-month period under study, 122 individual patients (102 men and 20 women) were examined by the psychiatrist out of an estimated 200 referrals. A number of individuals were referred for treatment but were released from the jail prior to examination or were judged to need no psychiatric examination. No data were compiled on these individuals, and there is no information on their characteristics relative to those of the patients who were examined and the jail population as a whole. In that same period the psychiatrist reported a total of 337 patient contacts, for an average of 2.75 contacts per patient. A total of 117 individuals was seen only once, and 5 individuals were seen twice. Over one-third of the inmates who were examined were identified and evaluated in the first 24 hours after booking. For those examined, fighting, suicide attempts, and other grossly disorganized and disruptive behavior precipitated referral in almost one-half of the cases (6).

The computation of accurate morbidity rates is difficult because in the 1973 calendar year data were not compiled on the number of individuals booked into the jail. The number of individuals booked in 1973 (N=6,300) was computed as the average of the number of individuals booked for calendar years 1972 (N=6,090) and 1974 (N=6,510). Review of data from 1972 through 1974 indicated a relatively consistent rate of jail bookings, with $^{5}/_{12}$ of all bookings for the year occurring during the 5-month study. Based on this figure, it was estimated that 2,625 individuals were booked into the jail during the 5-month study period. Based on the number of patients examined by the psychiatrist, it was estimated that the overall population had a psychiatric morbidity rate of 4.6%.

Demographic Characteristics

The patient group was significantly different from the overall jail population in two respects. The patient sample was older (mean of 31.0 years for men and 30.3 for women versus mean of 23.3 for men and 29.2 for women overall); it also had a higher percentage of minority group men (25% versus 11%) ($p<.001$, two-way analysis of variance). Nearly 75% of the male patients (N=69) and over 50% of the female patients (N=10) had never married or were divorced or separated.[1] Fifty percent of the male patients (N=45) and 43% of the female patients (N=7) had not graduated from high school.

Criminal History

Eighty percent of both the male and female patients (N=80 and 16, respectively) were booked into the jail on felony charges. The rest of the patients were charged with misdemeanors. The overwhelming majority of the male patients (N=83, or 89%) and almost three-quarters of the female patients (N=13) had a history of prior arrest with jailing. Less than one-half of the male patients (N=34, or 40%) and only 11% of the female patients (N=2) had served prison sentences.

Psychiatric History

A majority of the patients of both sexes reported that they had had prior psychiatric examinations (see table 1). These examinations included single examinations for court or welfare purposes as well as ongoing treatment regimes. Most of these patients had had psychiatric hospitalization, primarily in state hospitals. A number of the male patients had received inpatient treatment in military hospitals or in Veterans Administration hospitals. Considerably more men than women had received court-ordered psychiatric examinations. These examinations occurred while the subject was in a hospital, an outpatient, or in jail. A large number of the male patients had received psychiatric examinations while in jail or prison, compared with only one female patient. Most of the female patients reported suicide attempts, compared with less than one-third of the male patients.

Psychiatric Diagnosis

Table 2 summarizes the diagnoses of these 122 patients. Secondary depression was a common diagnosis and was often accompanied by agitation and suicidal ideation. The functional psychotic diagnoses of mania and schizophrenia were much more common among the male patients than the female patients. Of the 36 patients diagnosed as schizophrenic, 13 (36%) were jailed for misdemeanor offenses.

Antisocial personality was diagnosed in over one-third of the patients. The single diagnosis of antisocial personality was made in 4 patients. Twenty-four of the patients with this diagnosis also received a second diagnosis of drug dependence or alcoholism. Over one-quarter of the patients received a diagnosis of alcoholism. Drug dependency was a much more common diagnosis in the male patients than the female patients and was present in over one-third of the sample.

[1]These and other percentages reported in this paper are calculated on the basis of the number of inmates for whom information was available.

TABLE 1
Psychiatric History of 110 Psychiatric Patients in King County Jail, Seattle, Washington*

Item	Men (N=94) Number	Men (N=94) Percent**	Women (N=16) Number	Women (N=16) Percent**
History of psychiatric examination				
Yes	81	86	14	88
No	13	14	2	12
Type of psychiatric examination				
Inpatient	46	46	10	63
Court-ordered	22	21	3	19
Outpatient	47	47	5	31
Jail	25	24	0	—
Prison	12	11	1	6
History of suicide attempt				
Yes	27	29	9	56
No	67	71	7	44

*Of the 122 patients in the study, no data were available for 8 men and 4 women.
**Total for type of psychiatric examination adds up to more than 100% because some subjects received more than 1 type of examination.

TABLE 2
Psychiatric Diagnosis of 122 Psychiatric Patients in King County Jail

Diagnosis	Men (N=102) Number	Men (N=102) Percent*	Women (N=20) Number	Women (N=20) Percent*
Depression	0	—	3	15
Definite	—	—	1	—
Probable	—	—	2	—
Mania	7	7	0	—
Secondary depression	17	17	4	20
Definite	8	—	3	—
Probable	9	—	1	—
Schizophrenia	31	31	5	25
Definite	23	—	1	—
Probable	8	—	4	—
Anxiety neurosis	2	2	1	5
Definite	0	—	0	—
Probable	2	—	1	—
Antisocial personality	45	45	7	33
Definite	38	—	5	—
Probable	7	—	2	—
Alcoholism	26	26	6	30
Definite	16	—	3	—
Probable	10	—	3	—
Drug dependency	51	51	3	15
Mental retardation	1	1	2	10
Organic brain syndrome	5	5	0	—
Homosexuality	1	1	0	—
Undiagnosed illness	6	6	2	10

*Total adds up to more than 100% because some subjects received more than 1 diagnosis.

DISCUSSION

Because no systematic attempt was made to screen all inmates for psychiatric disorder, the morbidity rates can only be considered as first approximations of the actual psychiatric morbidity. The calculated morbidity figures are probably low due to the fact that only 122 of the estimated 200 referred patients were actually examined. Data on those referred for examination but screened out by the psychiatrist or released before the examination were not compiled as part of the study, and no discussion of these individuals is possible. Lack of precision in the rates is compounded by uncertainty as to the actual number of inmates in the jail and at risk during the study period.

No systematic attempt was made to review court or hospital records to verify the patients' histories. Incidental verification frequently occurred from contact with families, therapists, or attorneys. Some distortion in the histories was evident, with patients frequently minimizing the extent of their criminal and psychiatric histories.

There was no clearly defined level of disability that resulted in psychiatric referral. The magnitude of disability ranged from dysfunction associated with assaultive or suicidal behavior to milder disturbances such as anxiety states and depressions. It is also likely that disruptive inmates were most frequently referred and that these patients are overrepresented in this sample (6).

The older mean age of the patients (31.0 years for men and 30.3 years for women) relative to the overall population is worthy of note. In his survey of large populations, Hagnell (7) reported that the average annual incidence of moderate to severe mental illness has a bimodal distribution, with peaks in the fourth and eighth decades of life. The average age of the jail patient population is in keeping with this trend. A relatively younger age of the overall jail population is in keeping with Robins' observation (8) that the peak period of severe disturbance is in late adolescence and early adult life and that the severity of the syndrome diminishes by the fourth decade.

The high proportion of patients who were unmarried or separated, had not completed high school, had prior jail and prison histories, and had prior psychiatric illness suggests that the typical in-jail psychiatric patient suffers from a generalized psychosocial disorganization. Most of these patients correspond to the group 3 patients identified by Yarvis (9) in his study of federal prison inmates. Those offenders were characterized by multiple prior convictions; poor work, military, and school performance; and a high frequency of psychiatric illness. These data indicate that the overwhelming majority of the jail patients would be classified as belonging to social class V of the Hollingshead and Redlich index of social position (10).

The high percentage of schizophrenic patients arrested on misdemeanor charges points to significant gaps in the psychiatric health services available to these severely handicapped individuals. The criminal activity of these patients may be viewed as only one manifestation of a total psychosocial disability and supports the concept that the jail is an important link in

the network of social support services for lower-class individuals (11).

It is difficult to establish accurate psychiatric morbidity data and prevalence rates for the various psychiatric syndromes in offenders. The offender population encompasses a wide diversity of problematic individuals who come to the attention of the criminal justice system. The class of offenders includes individuals who are involved in relatively minor antisocial actions (misdemeanors) as well as those who are involved in more serious antisocial behavior (felonies).

Guze and associates (12) have pointed out that selection forces operate at every step in the criminal justice system and accurate epidemiological studies become difficult. While most serious offenders are jailed pending trial, many are released on personal recognizance or bond. Not all offenders are found guilty of the offenses that they may have committed. Many plead guilty to lesser charges with the concurrence of the prosecution and the court to expedite the adjudication process. Others are found incompetent to stand trial or criminally insane. The disposition of these various offenders runs the gamut from probation to imprisonment, to state and local hospitals, as well as special supervisory situations.

Literature on the psychiatric morbidity of nonhospitalized offenders is scant and refers to the following 3 major offender groups: felons incarcerated in state or federal prisons, felons on probation or parole, and accused individuals held in jail (13).

IMPRISONED FELONS

More epidemiological data are available on the psychiatric problems of prison inmates than for any other offender group. Haines (14), Glueck (15), and McCartney (16) examined consecutive series of new admissions to state prisons. The prevalence of psychiatric abnormality reported (psychotic and neurotic conditions exclusive of psychopathy) varied from 12% in Glueck's study to 20% in Haines's and 28% in McCartney's. In a survey of psychiatric morbidity in over 20 prison psychiatric units across the nation, Anderson (17) reported rates of "nervous or mental abnormality" ranging from a low of 34% to a high of 82%. In a more recent attempt to measure the prevalence of psychiatric disorder in prison felons, Sutker (13) used a cross-sectional survey and the Minnesota Multiphasic Personality Inventory as a diagnostic tool. He reported that rates of psychoses, varying according to sex and race, ranged from 10% to 22%. These studies tell us little, however, regarding the clinical need for psychiatric treatment for these patients.

Other authors have reported morbidity data for prison inmates who require in-prison treatment. Ernst and Keating (18), in their descriptive analysis of the psychiatric treatment of California felons, estimated that 10% of prison inmates require segregation because of psychiatric illness. In a cross-sectional survey of inmates at Lewisburg Federal Prison in Pennsylvania, Roth and Ervin (19) reported that only 13% had ever received in-prison psychiatric treatment.

In spite of the varying and often unspecified criteria used for the diagnosis of psychiatric illness and the extreme range of reported rates of abnormality, one can say that from one-tenth to one-third of all prison inmates manifest psychiatric illness.

Direct comparisons of the jail-derived morbidity data with the prison data are unwarranted due to the differences in the populations studied. One might anticipate that the jail population, which contains individuals who will be adjudged either criminally insane or incompetent and individuals who are most acutely exposed to the stresses of total institutional living (20), would have even higher rates of psychiatric illness requiring treatment. It is my clinical impression that significant amounts of manifest psychiatric illness are as yet unrecognized in this jail's population, and that with more intensive case finding efforts, rates comparable to those reported for the imprisoned felons would be demonstrated.

NONINCARCERATED FELONS

Guze and associates (12, 21, 22) and Cloninger and Guze (23, 24) of the Washington University group in St. Louis used a standard psychiatric diagnostic battery to determine psychiatric morbidity rates among nonincarcerated felons. They found higher than average rates of antisocial personality, alcoholism, and drug dependency among men and women and of hysteria among women. Their study populations consisted of consecutive felons, and no attempt was made to select the subjects on the basis of manifest psychiatric disorder. The rates of schizophrenia ranged from 1% to 1.5%. No other psychotic illnesses were noted in their patient populations. Overall morbidity rates ranged from 52% to 81% exclusive of the diagnosis of sociopathy. Follow-up studies (21, 24) have confirmed their original assessments.

In spite of significant selection factors operative in the identification of the jail patients, the diagnostic schema for this study was similar to that used by the Washington University group, and limited comparisons can be made. Table 3 presents the diagnostic profile for convicted male and female felons studied by Guze and associates and Cloninger and Guze Certain differences between their study populations and the jail sample are evident. Jail patients had a higher rate of schizophrenia; in addition, the men had higher rates of drug dependency and mania and the women, primary depression. Alcoholism, anxiety neurosis, and antisocial personality were diagnosed less frequently in the jail patient population.

Many patients identified in the jail study would not have been included in the surveys by the Washington University group. Significant numbers of the jail patients who were charged with misdemeanors would

TABLE 3
Psychiatric Diagnosis of 289 Convicted Felons, in Percents

Diagnosis	Men (N=223)*	Women (N=66)**
Depression	—	6.0
Mania	—	—
Secondary depression	—	—
Schizophrenia	1.0	1.5
Anxiety neurosis	12.0	11.0
Antisocial personality	79.0	65.0
Alcoholism	43.0	47.0
Drug dependency	5.0	26.0
Mental retardation	1.0	6.0
Hysteria	—	41.0
Undiagnosed illness	1.0	12.0

*Data are from Guze and associates (22).
**Data are from Cloninger and Guze (24).

never have gone to prison or been referred to the state probation department. The felons were sufficiently handicapped that a large portion of them would have been sent to the state hospital for the criminally insane or other psychiatric hospitals or would have been judged incompetent to stand trial. A full understanding of the relationship between criminality and psychiatric disorders is not possible without studying this group of patients.

JAIL MORBIDITY

The famous "court clinics" of Boston, New York, and Chicago were established in the early part of the 20th century to assist local courts in the disposition of mentally disordered offenders. In an excellent review of then current programs, Anderson (17) reported a 45.6% overall prevalence of "abnormal mental conditions" in 1,000 presumably consecutively selected misdemeanants at the Municipal Court of Boston. In a series of reports Anderson (17, 25, 26) examined the prevalence of psychiatric morbidity in selected misdemeanant offender groups. He noted a wide range in prevalence; for example, 90% of the vagrants, 66% of the shoplifters, and only 48% of the prostitutes were regarded as mentally abnormal.

Bromberg and Thompson (27) reported markedly lower rates of psychiatric illness in their study of 10,000 consecutively selected cases of mixed misdemeanants and felons from the New York City Court of General Sessions. Eighteen percent of the sample was characterized by psychiatric abnormality, with 1.5% diagnosed as psychotic and 2.4% as mentally defective. They concluded from their study that "psychoses, mental defect, and psychopathic personality play a relatively minor role in the causation of crime."

The overall morbidity rates from this jail sample are more consistent with those reported by Bromberg and Thompson, suggesting that psychiatric morbidity in a mixed felon-misdemeanant jail population is under 20%. The relatively low psychiatric morbidity rates reported in this study may reflect the fact that the program's goal was to evaluate only problematic inmates for in-jail treatment. It is presumed that only a fraction of those reported as "abnormal" in the previously discussed studies would actually require in-jail treatment. Anderson's work does point to a relatively high rate of psychiatric illness found in the jailed misdemeanant. His observations were confirmed in the present study, where misdemeanants were overrepresented in the schizophrenic patient population (36% compared with only 20% in the overall jail patient population).

The impact of a psychiatric consultant in the jail on the jailing practices of the police and courts, as well as on the utilization of psychiatric services by inmates and staff, is poorly understood. At the time of this study the existence of the in-jail psychiatric program was not widely known, and it was unlikely that significant numbers of patients were jailed primarily for psychiatric treatment.

Psychiatric treatment is an important element in the overall care and rehabilitation programs for offenders. Until reliable morbidity data for the various subgroups and populations of offenders can be obtained, the development of programs and delivery of effective services will be inadequate.

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Prompt Publication Policy

The *Journal* would like to remind authors who are particularly interested in early publication (whether to establish priority of an idea, reveal innovative results of new research, or for other pressing reasons) of its prompt publication policy. Under this policy, short (maximum of six double-spaced pages) manuscripts will be considered for publication in the Brief Communications section of the first available issue. These manuscripts must still undergo expert scrutiny before being accepted, and two months must be allowed for the printing process. However, the time required for publication of these short articles can be lessened considerably.

Authors who would like to have their manuscripts considered under this policy should indicate this desire, as well as the reasons for it, when they submit their manuscripts.

BRIEF COMMUNICATIONS

Mania and Schizo-Affective Disorder, Manic Type: A Comparison

BY RICHARD ABRAMS, M.D., AND MICHAEL ALAN TAYLOR, M.D.

The authors report data gathered from a consecutive sample of 88 psychiatric inpatients who were diagnosed as having either manic disorder or schizo-affective disorder, manic type, according to Research Diagnostic Criteria *(1) similar to those proposed for* DSM-III. *There were no differences between diagnostic groups on clinical psychopathological or demographic variables, individual or family history, or treatment response.*

KASANIN introduced the term "schizo-affective psychosis" to describe a group of patients he felt were atypical but who had a good outcome and an intact affect:

> These are fairly young individuals, quite well integrated socially, who suddenly blow up in a dramatic psychosis and present a clinical picture which may be called either schizophrenic or affective, and in whom the differential diagnosis is extremely difficult. (2, p. 99)

Although most clinicians would agree that some patients display a "mixed" clinical picture, the entity has yet to be validated. Clayton and associates' follow-up data (3) showed that schizo-affective disorder was related to affective disorder and not to schizophrenia. Post (4) was unable to define the condition as it occurred in late life as either a separate entity or a specific variant of either schizophrenia or affective disorder. Cohen and associates (5), in their study of 15,909 veteran twins, found that the monozygotic pairwise concordance rate for schizo-affective disorder was more than twice that for schizophrenia but did not differ from manic-depressive illness. Welner and associates (6) and Croughan and associates (7) reviewed the difficulties with prior research in the area and in their own record review were unable to define the relationship between schizo-affective disorder and schizophrenia or affective disorder. Recently, Sovner and McHugh (8) reported that 50% of a sample of patients with schizo-affective illness ran a bipolar course: they concluded that most such patients actually suffered from manic-depressive illness.

DSM-II, the current *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association (9), includes a subgroup of schizophrenia designated schizo-affective type but states only, "This category is for patients showing a mixture of schizophrenic symptoms and pronounced elation or depression." *DSM-III*, the proposed revision of *DSM-II*, is now under active discussion and is slated for publication in final form in 1978 (10). *DSM-III* will contain a separate section on schizo-affective disorder, with well-defined, objective diagnostic criteria. Preliminary formulations of these criteria have been distributed by Spitzer and associates as the *Research Diagnostic Criteria (RDC)* (1). The *RDC* have not been proposed as the final form of *DSM-III*—rather, it is understood that modification and revision will occur over time to accommodate the particular needs of an official manual, widely used for other than research purposes.

We wish to contribute to this process by providing some data relevant to the validity of the diagnostic criteria for schizo-affective disorder, manic type, as set forth in the second edition of the *RDC* and the working draft for *DSM-III* (11). Our study compares this diagnosis with that of manic disorder in a sample of patients diagnosed according to objective, specific criteria that are compatible with the *RDC*.

METHOD

The data are derived from a larger study of 247 patients admitted to an acute treatment, adult, general

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psychiatric unit of a metropolitan teaching hospital (12).

In this study we have modified our original inclusion criteria for mania by adding the required flight-of-ideas or grandiosity. Required criteria include 1) hyperactivity, 2) rapid or pressured speech, 3) euphoric, expansive, or irritable mood, 4) flight-of-ideas or grandiosity, and 5) no evidence of psychostimulant drug abuse or medical illness known to produce psychiatric symptoms.

We then identified within this group all patients who also experienced one or more of the following first-rank symptoms (FRS): 1) audible thoughts (thought broadcasting), 2) voices conversing about the patient or commenting on his thoughts or behavior (complete auditory hallucinations), 3) experiences of influence, 4) experiences of alienation, and 5) delusional perception.

We define this subgroup as "schizo-affective disorder, manic type," and the remainder of the group as "manic disorder." These criteria are somewhat narrower than those of the *RDC*, but all patients in both groups satisfy the corresponding *RDC* criteria.

We then compared the two groups for clinical psychopathology, individual history, demographic variables, family history of psychiatric disorder, and response to treatment, using a previously described method (12).

RESULTS

Of the 88 patients who satisfied the study criteria, 78 were diagnosed as manic and 10 as schizo-affective. The mean ages were 40.4 years for the manic group and 38.0 years for the schizo-affective group (n.s.), and their mean ages at onset of illness were 27.8 and 30.5 years, respectively (n.s.). Manic patients had an average of .82 episodes of illness per ill patient year, compared with .94 episodes for schizo-affective patients (n.s.). In the manic group, there were 45 women and 35 men, and in the schizo-affective group, there were 4 women and 6 men (n.s.).

The treatment response (4=full remission), rated by a "blind" investigator, was quite favorable for both groups, with a slight but statistically insignificant advantage for the schizo-affective group (3.50 versus 3.15). The data in table 1 show no differences between the groups for a variety of clinical psychopathological variables, including the presence of two or more good prognostic signs (e.g., sudden onset, precipitating event, broad affect, good premorbid adjustment, and clouded consciousness). Table 2 shows no differences between the groups for current treatments, individual history of associated psychiatric morbidity, or family history of psychiatric illness.

Although it is possible that the small sample size for the schizo-affective group contributed to our failure to differentiate the groups significantly on any variable, for the most part there is a marked similarity between groups for the percentage of patients exhibiting a particular variable.

TABLE 1
Clinical Psychopathological Variables for the Diagnostic Groups

Variable	Manic Group (N=78)		Schizo-affective Group (N=10)	
	Number	Percent	Number	Percent
Good prognostic signs	70	90	9	90
Hyperactivity	78	100	10	100
Rapid/pressured speech	78	100	10	100
Euphoric	34	44	6	60
Expansive	48	62	6	60
Irritable	59	76	8	80
Labile	46	59	3	30
Flight-of-ideas	32	41	4	40
Grandiosity	55	71	7	70
Persecutory delusions	43	55	6	60
Nudity	26	33	3	30
Fecal incontinence/ smearing	11	14	1	10
Head decoration	29	38	3	30
Violence	36	46	4	40
Confusion	20	26	1	10
Auditory hallucinations	34	44	5	50
Other hallucinations	20	26	3	30

TABLE 2
Treatment, Individual History, and Family History for the Diagnostic Groups

Item	Manic Group (N=78)		Schizo-affective Group (N=10)	
	Number	Percent	Number	Percent
Treatments received*				
Neuroleptics alone	11	16	4	40
Lithium ion	34	49	3	30
Neuroleptics plus lithium ion	13	19	0	0
ECT (alone or combined with medication)	10	14	3	30
None	1	1	0	0
Individual history				
Alcoholism	33	42	3	30
Sociopathy	8	10	1	10
Drug abuse	16	21	4	40
Family history for first-degree relatives**				
Ever ill with affective disorder	51	14	5	14
Ever ill with alcoholism	39	11	4	11
Ever ill with schizophrenia	0	0	0	0

*Adequate data available for 69 manic patients.
**Adequate data available for 67 manic patients (355 first-degree relatives) and 7 schizo-affective patients (36 first-degree relatives).

The *RDC* (as well as the working draft of *DSM-III*) employs duration of illness as one classification axis, and we considered the possibility that our two groups might have differed on this variable. The mean duration of illness for the index episode was somewhat longer for the schizo-affective (15.12 weeks) than for the manic group (10.79 weeks), but this difference was not statistically significant (t=.66)

DISCUSSION

There are no generally accepted specific criteria for schizo-affective disorder, manic type, and no two studies have used exactly the same criteria. We chose FRS to separate schizo-affective disorder from manic disorder as these abnormal experiences can be rated reliably, are considered by many to be diagnostic for schizophrenia, and figure prominently in the *RDC* for schizo-affective disorder.

Some investigators would certainly broaden the schizo-affective group by adding one or another phenomenological criterion. Few would disagree, however, that patients with a prominent affective syndrome plus FRS ought to be prime examples of any schizo-affective grouping.

Using these straightforward criteria, we are unable to differentiate mania from schizo-affective disorder, manic type, using a group of variables that we believe are critical in the validation of psychiatric disorders. We present these data in the hope that others will be prompted to do similar analyses, eventually providing a data base adequate to assess the validity of the diagnosis of schizo-affective disorder.

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Coffee Consumption Among Psychiatric Inpatients

BY DANIEL K. WINSTEAD, M.D.

Of 135 patients on an acute psychiatric ward, 34 were "high users" of coffee. The high users tended to be older, single, and have diagnoses of psychosis. They showed significantly more state anxiety than other patients, but there were no differences in trait anxiety or MMPI scores. Further research is suggested to determine whether high caffeine consumption among inpatients may be related to staff coffee-drinking behavior and/or treatment with anticholinergic drugs.

CAFFEINE is the most widely used central nervous system stimulant. In 1972, Americans spent more than $1.2 billion for 2.8 billion pounds of coffee—more than

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150 billion cups of coffee. This represents a per capita consumption of 14.3 pounds (1). Although heavy use of caffeine produces dependence, tolerance, and withdrawal symptoms (2), the general public has been reluctant to classify caffeine as a drug. This reflects the drug's "domestication," i.e., its incorporation into our daily life in such rituals as the coffee break and the coffee club (3).

In a recent article, Greden (4) reported the multiple side effects of excess caffeine ingestion and commented on the frequent misdiagnosis of anxiety neurosis in cases of caffeinism. The symptoms of irritability, nervousness, palpitations, restlessness, disturbed sleep, gastrointestinal irritation, and diarrhea are common to both disorders, and only a careful dietary history distinguishes the two. To complicate matters further, the symptoms of caffeine withdrawal can also mimic those of an anxiety state, with nervousness, restlessness, and headache being the most common complaints (5–7). Although Greden noted "chronic coffee drinking [of] patients on inpatient psychiatric services," he gave no supporting data. He suggested further investigations of the prevalence and incidence of caffeinism.

In previous reports (8, 9) I have evaluated drug-seeking behavior among psychiatric inpatients with respect to the use of minor tranquilizers as well as analgesics. These studies revealed a correlation between individual anxiety levels and the extent of use of such drugs when made freely available. During these studies, it became evident that there was another drug freely available to all of these patients on the ward—caffeine, in the form of coffee. Many patients drank excessive amounts of coffee, but those with a diagnosis of alcoholism seemed to be particular offenders. Many patients purchased large beer mugs which they continually refilled with coffee.

The present study was undertaken in an attempt to quantify coffee consumption in an inpatient psychiatric setting and thus to identify the high user of caffeine. The hypothesis was that high coffee consumption would be closely correlated with both high levels of anxiety and diagnoses of alcoholism.

METHOD

The study was conducted on the 27-bed psychiatric unit of the U.S. Army Hospital in Nuremberg, Germany. Although this facility also treats dependents, most patients are active duty military personnel. Eight to 10 of the beds are generally occupied by patients in a 4-week alcohol rehabilitation program. The remainder of the ward is an acute treatment facility; chronic patients are generally evacuated to a larger Army hospital in the states. The patient/staff ratio is approximately 1:1, with a 5:1 ratio for each of the shifts. Five psychiatrists share the responsibility for these patients.

All patients admitted to the unit were initially included in the study. During their first 5–7 days of hospitalization, they were given the State-Trait Anxiety Inventory (10), the Minnesota Multiphasic Personality Inventory (MMPI), and a questionnaire that examined their prior use of coffee, tea, and other drugs. Coffee was freely available on the ward between the hours of 6 a.m. and 10 p.m. On an average day, 15 gallons of coffee were consumed by patients and staff. All patients were instructed to record each cup of coffee that they drank throughout the day, and these records were collected daily and reviewed by the staff. Patients were subsequently interviewed in an attempt to determine the accuracy of their daily records.

RESULTS

During the 3-month period, a total of 188 patients were admitted for varying intervals. The data are based on the 135 patients for whom psychological testing could be completed before discharge. The majority of patients not included were hospitalized 4 days or less.

Thirty-four of the 135 patients tested (25%) were identified as "high users" of coffee, defined as drinking 5 or more cups of coffee on 2 or more days during their hospitalization. This cut-off point of 5 cups represents a minimum of 500 mg of caffeine, a large dose (4, 5). Table 1 presents demographic data for high users compared to the other patients in our sample. The high users were older and more often single, divorced, or separated. In addition, they had a higher incidence of psychosis and a lower incidence of depressive neurosis. Therefore their hospital stays were longer and they were more likely to be evacuated to a stateside hospital than the other subjects. Given the higher incidence of psychosis in the high-user group, it is not surprising that they were treated with phenothiazines or antidepressants more often than the other patients. Patients in the high-user group had a significantly higher level of state (current) anxiety than the other group (mean scores=51.7 and 49.6, respectively, $p \leqq .05$). Scores on the trait (personality) anxiety scale were almost equal. It is of particular interest that none of the high users was given a diagnosis of anxiety neurosis. Interestingly, the coffee consumers revealed less psychopathology on 9 of the 13 MMPI scales, although there were no statistically significant differences between the groups.

The results of the questionnaire survey are presented in table 2. The high-user group reported an average daily intake of 6.7 cups of coffee compared with 3.2 cups in the other group. Both groups reported a rather high incidence of nervousness from overindulgence in coffee, and a substantial percentage also reported physical symptoms when they drank less coffee than usual. There were, however, significantly more reports of anxiety symptoms on withdrawal from caffeine in the high-user group.

Patients in the two groups reported similar patterns

TABLE 1
Demographic Data for High Users of Caffeine and Other Patients

Item	Group: High Users (N=34)	Group: Other Patients (N=101)	Significance*
Mean age (years)	29.2	25.6	p≤.05
Male (percent)	91	83	p≤.05
Living with spouse (percent)	21	44	p≤.05
Mean hospital stay (days)	20.9	14.2	p≤.05
Diagnoses (percent)			
Alchcholism	41	43	n.s.
Depression	24	39	p<.05
Psychosis	32	13	p<.05
Other	3	5	n.s.
Taking phenothiazines or antidepressants (percent)	38	28	p≤.05
Evacuated to U.S. hospital (percent)	41	16	p≤.05

*By point-biserial analysis (age and length of stay) or significant difference of proportions.

TABLE 2
Results of Questionnaire on Caffeine Consumption Among Psychiatric Inpatients

Item	Group: High Users (N=34)	Group: Other Patients (N=101)
Daily consumption		
Coffee (cups)	6.7*	3.2
Tea (cups)	0.3	0.7
Colas (number)	1.3	2.5
Self-reports of caffeine effects (percent)		
Deny dependence	24	19
Side effects from excessive intake	17	17
Anxiety symptoms from consumption	30	24
Physical withdrawal symptoms	10	7
Anxiety withdrawal symptoms	26**	5

*Significantly different (p≤.05, point-biserial analysis).
**Significantly different (p≤.05, significant difference of proportions).

of use of analgesic medications. Since this study was done concurrently with a study designed to quantify the use of available-on-demand analgesics (9), additional data concerning the use of these drugs were available. Only 28% of the high-user group availed themselves of analgesic medication (propoxphene napsylate) compared with 40% of the other patients (p≤.05, significant difference of proportions). Furthermore, only 3% of the caffeine group compared with 16% of all other patients used these medications frequently (p≤.05, significant difference of proportions). Thus, the coffee consumers were actually less likely than the other patients to use or abuse analgesics under the hospital conditions.

Two cases of caffeinism were identified. The first, a 22-year-old man, had been admitted with a diagnosis of schizophrenia. On his eighth day of hospitalization he complained of palpitations, restlessness, increasing anxiety, and anorexia. An EKG revealed paroxysmal atrial tachycardia. When questioned about his coffee consumption, he reported that he had been drinking 10–15 cups of coffee a day. He was counseled in this regard and immediately stopped drinking coffee. His tachycardia disappeared within 48 hours and he reported a lessening of his anxiety. The second patient was a 29-year-old man who was transferred to the psychiatric ward from the surgical service, where he had recently undergone a vagotomy and pyloroplasty for bleeding duodenal ulcer. Before his transfer for further treatment of an agitated depression, he had been placed on a bland diet and instructed to avoid caffeine entirely. In spite of the warnings, he drank 7–12 cups of coffee during each of his first 2 days on the psychiatric service. He developed anxiety of panic proportions and had increased abdominal pain. Following further counseling, he voluntarily reduced his coffee intake to 2 cups a day and his abdominal pain and anxiety abated within 24 hours.

DISCUSSION

The results of this study indicate that the high user of coffee on a psychiatric inpatient service tends to be an older man who is unmarried or not living with his spouse. Although alcoholism was the most prevalent diagnosis, the proportion was not different from that of the ward in general. However, there were significantly more psychotic patients in the high-user group, who tended to be hospitalized longer and were more frequently evacuated to a stateside hospital.

The anxiety inventory revealed a statistically significant elevation in state anxiety for the high-user group. It is unclear whether this high anxiety level is the direct result of caffeine intoxication or whether it motivates chronic coffee drinking. Further research would be necessary to answer this question definitively, but I suspect that both factors are operative. Since the high users were less often users or abusers of analgesics, their drug-seeking behavior on the ward was not generalized; rather, it was specific for caffeine in the form of coffee.

The results of this study are comparable to the questionnaire data reported by Goldstein and Kaizer (5). In a survey of 239 housewives, they found a 26% rate of heavy caffeine use (again defined as more than 5 cups of coffee a day), which is approximately the same incidence found in the inpatient population I have studied. The heavy users in both studies reported more symptoms of caffeine withdrawal, such as nervousness, irritability, and restlessness. Goldstein and Kaizer also found that the heavy users were older; they speculated that the coffee habit may take several years to develop.

The finding of a higher proportion of psychotic

patients in the high-user group was of particular interest. Increased water ingestion has long been considered a reliable physiologic measure distinguishing schizophrenics from normal controls (11, 12). In a recent report, Raskind and associates (13) described a syndrome in postmenopausal women of "agitated psychotic depression, increased water ingestion, and electrolyte values consistent with the syndrome of inappropriate antidiuretic hormone secretion." Although none of our patients was diagnosed as having water intoxication, the possibility that underlying brain physiology might explain their coffee drinking behavior should not be discounted. A much more likely explanation, however, would be that many of these patients were suffering from the dry-mouth side effect that so frequently results from the potent anticholinergic action of the phenothiazines and tricyclic antidepressants. As mentioned earlier, 38% of the high users were taking these medications during their hospitalization compared with only 28% of all other patients. All of the psychotic patients in the high-user group were on these medications during hospitalization.

Coffee is a poor choice of beverage for the schizophrenic or psychotic patient. Caffeine would be expected to increase the patient's anxiety level; further, a case of caffeine intoxication that resulted in psychotic decompensation has been reported (14). In addition, caffeine is known to interfere with bedtime sedatives (15) and may also interfere with other psychopharmacologic agents (4). One wonders whether the psychotic patients were not trying to counteract the unpleasant sedative effects of their medication by drinking coffee.

There are some obvious methodological problems in this present study. First, we were dependent on patients' memory and honesty. Second, no attempt was made to measure consumption of any other beverages containing xanthines or of those beverages consumed off the ward by patients with hospital privileges. Had we been able to gather these other data, we might have found a much greater percentage of high users. A more controlled environment and the use of a token system would give a more accurate picture of actual consumption patterns. In addition, staff patterns of coffee consumption should be evaluated. Clinical observations during this study suggested that many of the psychiatric staff were as guilty as the patients of excessive caffeine ingestion, and some of the patients may have been modeling this staff behavior.

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The Psychotherapist and Informed Consent

BY JOHN O. NOLL, PH.D.

The author points out that psychotherapists are being increasingly required by law to function as instruments of social control. He believes it is incumbent on therapists to employ full and informed consent procedures with their patients in regard to the effects of providing psychiatric information to potential employers, insurance carriers, and other third parties.

ONE OF THE WAYS in which psychotherapists may exercise power over others is by assuming the role of double agent (1). Whenever the mental health professional is employed by an agency or by an institution, the institution's needs will almost invariably supersede those of the patient. Bazelon (2) referred to a basic, usually unacknowledged antagonistic relationship between the individual and the hospital or institutional professional. He also gave illustrations of the influence that the professional's own hidden agendas have in determining the professional's conduct toward the patient, e.g., such concerns as public relations.

Halleck (3) stated,

> A patient . . . usually assumes that the doctor has no other purpose except to help him; he may not know or may easily forget that his psychiatrist also holds allegiance to an agency. Therefore, the patient may reveal things that can lead the psychiatrist to make decisions that result in denying the patient privileges. (p. 120)

In other words, the individual incriminates himself.

The double agent functions of psychiatry represent what Szasz (4) referred to as institutional psychiatry, contrasted to what he called contractual psychiatry (p. xxiii). The distinguishing characteristic of the latter is that individuals who independently seek psychotherapeutic help make their own contractual arrangements with a mental health professional in private practice. In a contractual arrangement the therapist is presumed to place the interest of his or her client above any other outside interest. As a consequence, patients need not fear that what they confide to their therapist will be used against them in any way.

With rare exceptions this assumption is undoubtedly correct, but there are circumstances that combine to transform the private contractual relationship into a double agent situation. These particular circumstances have been explored only recently (5, 6). A brief examination of these circumstances will reveal that in several ways individuals who seek contractual psychotherapeutic help from an independent private practitioner are placing themselves in as much jeopardy as those who seek help from institutional therapists.

DOUBLE AGENT SITUATIONS

Over the past several years there has apparently been a vast increase in the number of requests for information from mental health professionals regarding former patients (3, 7). These requests emanate largely from employers who are interested in prospective employees' psychological or psychiatric backgrounds. Employers are including on employment application forms some variant of the following question: Have you ever received treatment for an emotional or mental problem?

Individuals who have received or are receiving psychotherapy or counseling have two alternatives: they may answer yes or no to the question. If they are "honest," they will respond affirmatively; if they feel that this is a private matter, they may answer no. When individuals reply yes to the question they engage in their own incrimination and place their prospects for employment in jeopardy. Once they have indicated an affirmative response they are typically requested to sign a waiver form that permits the employer or his or her representative to communicate with the applicant's former or present therapist. If the applicant wants the job, he or she has no choice but to give consent to allow the employer to obtain highly sensitive personal information that may be used repressively; i.e., the employer may not hire the applicant because of the information obtained from the individual's therapist.

When individuals grant their consent by signing the waiver they also risk converting the therapist into a double agent because most therapists will respond to requests for information that are accompanied by a signed waiver. The kind of reply that the therapist formulates will determine how much harm is done to the patient. That a reply to a request for information can be an agonizing process for the therapist is illustrated by some of Halleck's comments regarding such requests (3):

> The psychiatrist who receives a request for information about a former patient . . . is in a difficult moral position.

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> If the patient was not too disturbed and if the psychiatrist knows that he benefited from treatment, he can write some highly commendatory things about his client and there will be few complications. The psychiatrist's conscience will thus be clear and his patient will get his job or his policy. Usually, however, the situation is more equivocal. The psychiatrist frequently knows that some of the things he might reveal could prevent his former patient from getting a job or a policy. Sometimes there is very little the psychiatrist can say that would be favorable; if he responds honestly, the patient loses. (p. 125)

Although Halleck made this statement as an institutional psychiatrist, his comments reflect the dilemma of most private practitioners who are the recipients of requests for information accompanied by a signed waiver. The therapist who was once the patient's agent becomes a double agent with virtually unencumbered potential for using his or her knowledge about the patient repressively. If the therapist was pleased with the outcome of his or her contacts with the patient, a highly commendatory statement about the patient may overcome the stigma the patient may carry for having sought therapy in the first place. If the therapist was not pleased with the patient, the situation is more equivocal, and the communication written to the employer may be accompanied by a depreciating, stigmatizing label as well as a damaging character reference.

Halleck's statement also mentions another sphere of individual autonomy that may be jeopardized as a consequence of having seen a therapist, the application for insurance, particularly life insurance. Insurance applications almost invariably include a question regarding the status of the person's mental health. Again, should the person respond affirmatively to the question he or she will be required to sign a waiver form that allows the insurance company to request information from the therapist. As in the instance of the employer's request, the therapist is forced into a double agent role. The information and diagnosis that the therapist provides will contribute to the insurance company's decision to either grant the policy at the usual actuarial rates, grant the policy but with higher premiums, or reject the application.

One of the inherent dangers for individuals who are refused an insurance policy resides in the probability that the damaging information is likely to be put into a central computer system such as the Medical Insurance Bureau in Boston, Mass. A central computer system can make potentially repressive information available to any other insurance company. Such information is becoming more available because increasing numbers of health insurance policies have been including coverage for mental health care.

INFORMED CONSENT

It would appear that psychotherapists may find it necessary to take the concept of informed consent more seriously (8). In medicine, full and informed consent demands that physicians inform their patients fully of their condition and what procedures or treatment will be required to help their condition. In addition, patients are to be informed of the risks involved as a result of the treatment. Patients may then give their consent to the treatment or may decide not to undergo treatment because in their view some of the consequences of the treatment are unacceptable. If we analogize to the psychotherapeutic relationship, it would seem that it is incumbent on the therapist to inform prospective patients of the risks they may take with reference to future employment possibilities or future insurability.

A similar problem arises when potential patients wish to exercise their option of seeking psychotherapy under the provisions of a health insurance policy that covers mental health care.[1] If individuals wish to exercise this option it would appear that psychotherapists have an obligation to inform them of the potential hazards that exist with respect to diagnosing their condition initially and providing the insurance carrier with periodic information regarding the nature of their problems at any particular time throughout the course of therapy. It is possible that many patients may not be immediately concerned about the information that is sent to insurance carriers about themselves. However, this does not obviate the therapist's need or responsibility to fulfill the obligation called for under the concept of full and informed consent. If nothing else, it does provide the patient with a choice; he or she may even decide to pay out of pocket. If the psychotherapist does not employ informed consent procedures, he or she may act unwittingly as a double agent while the patient who sought him or her out in the first place for help will suffer the consequences of not having been informed.

The above examples are illustrative of the many other circumstances that place the therapist in the role of double agent. Examples of other applications that contain inquiries that may have untoward results for the patient are those for college admission and a driver's license.

LEGAL PRESSURES

There are other newly emerging pressures that might transform the psychotherapist into a double agent through legislative action and judicial decision. In essence, the new laws and judicial decisions appear to be explicitly transforming the psychotherapist into an instrument of social control.

Two examples may be cited to illustrate what may be an emergent and growing trend throughout the

[1] If therapists employed a policy of having no contact with third parties under any circumstances, there would be no particular difficulty with these considerations. However, with the advent of third-party payers most therapists will probably prefer to adopt full and informed consent procedures.

country. During the past several years many states have enacted child abuse and child neglect legislation. Typically, such laws include the mandatory reporting by various professionals and others of suspected instances of child neglect or abuse. One such recently enacted law (9) states,

> Any physician, nurse, dentist, optometrist, medical examiner or coroner, or any other medical or *mental health professional*, school teacher or administrator, school counselor, social worker, day care center or any other child care worker, police or law enforcement officer having knowledge of or reasonable cause to suspect that a child coming before him in his official or professional capacity is abused or neglected shall report the circumstances to the division. (italics added)

The recent *Tarasoff* decision by the Supreme Court of California (10) provides another example of the trend toward making psychotherapists instruments of social control. In this case the court held that if a patient expresses a death threat toward a third party it is the responsibility of the psychotherapist to inform that third party or that third party's responsible relatives of the nature of the threat.

If other states adopt this ruling, and if other legislative action is undertaken to provide for the reporting of other types of behaviors that society would like to control, the following implications for the practice of psychotherapy are immediately apparent: 1) greater numbers of patients will incriminate themselves and be subject to legal action, 2) psychotherapists may well have to defend themselves in courts of law for making allegations about patients, 3) a basically antagonistic relationship may develop between the patient and the psychotherapist, 4) therapists acting in accordance with the principle of full and informed consent may well deter patients from seeking their help, and 5) ultimately, fewer and fewer people will avail themselves of psychotherapeutic services because of the fear that they may talk about the "wrong" things or express unacceptable feelings or desires.

In his discussion of privileged communications, Slovenko (11) said,

> The privilege's exceptions, for all practical purposes, render the privilege a nullity. As a shield, it provides very little protection. Aside from no record keeping, one solution is that the psychiatrist also be a priest, for then he could, like a character in William P. Blatty's book, *The Exorcist*, say, "I can always tell the judge it was a matter of confession." (p. 70)

One implication of this for therapists who reject functioning as agents of social control would be to incorporate as a religious body, thereby placing their services under constitutional protection.

COMMENT

In view of several of the above considerations, it would seem that the professional organizations to which most psychotherapists and counselors belong might address themselves to the basic autonomy of the function of the psychotherapist. If this is not done, if the basic functions of the psychotherapist are not protected, psychotherapists will, in fact, become more and more instruments of social control.

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Catatonialike Symptomatology and Withdrawal Dyskinesias

BY MICHAEL I. GOOD, M.D.

The author describes a patient who presented catatonialike symptoms and dyskinesias associated with glutethimide discontinuance and antihistamine use. He hypothesizes that altered dopamine metabolism may produce some of the unusual neuropsychiatric characteristics of glutethimide withdrawal. Drug-withdrawal catatonia may be an additional entity in the differential diagnosis of catatonialike states of organic etiology.

DESCRIPTIONS OF drug-withdrawal states exhibiting signs and symptoms referable to the basal ganglia have appeared with increasing frequency in recent years (1–6). This report presents an unusual case of glutethimide (Doriden) discontinuance associated with antihistamine use in which a catatonialike state with oral-facial dyskinesia complicated the early diagnostic picture. The case illustrates the possible organic etiology of catatonia and catatonialike states (7–9). I will also discuss the glutethimide withdrawal syndrome, withdrawal dyskinesias, catatonia of organic etiology, and possibly related biochemical factors.

CASE REPORT

A 37-year-old divorced woman teacher with confusion and facial twitching was transferred to an emergency ward from another hospital after unsuccessful treatment with 50 mg of intravenous diphenhydramine (Benadryl) for a presumed drug-induced dystonic reaction.

The patient had experienced a series of stressful events in the 18 months before her admission. The family home was burglarized, her adolescent daughter became pregnant and left home, the patient was assaulted, and she reportedly developed mononucleosis. Brooding and depressed, she had stopped working 5 months previously when her job lost its funding. She had no history of psychiatric or neurological problems.

One week prior to admission, the patient reportedly developed headache, bronchial cough, and coryza. Three days later she experienced nausea, for which she took 50 mg of cyclizine (Marezine), using the 12 available tablets over a period of several days. She had also used glutethimide (reportedly never exceeding 0.5–1.0 g nightly) for sleep for 2–3 years and had recently exhausted her supply. The morning of her hospital admission, family members noted that she had incoherent speech. They also found the now empty glutethimide and cyclizine containers.

On admission, she was alert and frightened-looking, with tear-filled eyes, marked facial grimacing, and hand tremors. She maintained a recumbent posture. Initially she was suspicious and negativistic toward extended neurological examination. She spoke softly and incoherently or was mute, but she obeyed simple commands. Her first audible words were, "I am being born." Waxy flexibility of her arms was demonstrable. Psychiatric consultation was requested for possible commitment in view of the apparently catatonic nature of her psychosis, her history of depressed mood, the evidence of psychiatric precipitants, and possible drug ingestion.

Subsequently, however, she manifested extensor plantar reflexes and impairment of orientation, recent memory, and intellectual functioning. There were no other positive findings on general physical and neurological examination. A general serum toxic screen (including testing for glutethimide and antihistamines) was negative, and no other evidence of acute ingestion was found. Lumbar puncture, skull films, echo brain scan, chest and abdominal X-rays, and extensive serum and cerebrospinal fluid laboratory testing yielded no findings that accounted for her symptoms.

Twelve hours after admission she hallucinated a human figure and developed a generalized convulsion, which did not recur after treatment with diphenylhydantoin. An EEG showed generalized 6–7 Hz activity and bursts of 5–6 Hz high-voltage activity; a similar pattern appeared 24 hours later. The EEG pattern was consistent with a withdrawal or subclinical seizure state. A second lumbar puncture and toxic screen were negative. Over the next 4 days her confusion and grimacing abated and she was able to return to her home. She continued to do well and was diagnosed as having had an adverse drug reaction. At follow-up 1 year later, she had remained off sleeping medication, obtained employment, and experienced no recurrent symptoms.

DISCUSSION

Glutethimide

How is the clinical picture of this patient to be understood? With the exception of the catatonic symptoms, her course is consistent with the glutethimide withdrawal syndrome as it has been described in the literature. Glutethimide addiction was first reported in this country in 1957 (9), and subsequent papers have reviewed experience with chronic and acute glutethimide intoxication, dependence, and withdrawal phenomena (10–14). Reported withdrawal symptoms include headache, tremors, fasciculations, facial grimacing, seizures, myoclonus, anxiety, insomnia,

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nightmares, hyperactivity, disorientation, confusion, delirium, hallucinations, paranoid delusions, sweating, fever, chills, piloerection, nausea, abdominal cramps, and tachycardia. The EEG in the withdrawal state may show generalized theta activity of medium voltage, intermixed with runs of irregular, high-voltage delta activity (15). Curiously, regular and moderate doses of glutethimide (0.5–3.0 g daily) have been reported to produce symptoms resembling the withdrawal syndrome, even when there is no history of discontinuance (12). Acute intoxication without prior history of excessive use also can apparently cause withdrawal-type symptoms (11, 13), although chronic or excessive usage may have preceded the acute symptomatology in these unusual cases (15). Factors that may predispose an individual to withdrawal phenomena include irregular absorption, rapid and unusual metabolism (13), the accumulation of a potent, active metabolite (16), and intercurrent illness.

Dopaminergic-Cholinergic Balance Hypothesis

The patient's catatonialike symptoms warrant explanation in terms of medication-withdrawal effects in view of the acute, drug-related nature of the psychosis and the absence of other findings consistent with a diagnosis of schizophrenia, major affective disorder, intoxication, or organic disease. To support such an explanation, it is necessary to consider two points. First, glutethimide has pronounced anticholinergic properties that can cause excitatory effects, including seizures (13), as well as depressant effects. These properties may account for the antiparkinsonian effects of the drug (17). Second, a balance between dopaminergic and cholinergic influences has been proposed for normal functioning of brain striatum (18). Thus, the withdrawal of glutethimide could alter the dopaminergic-cholinergic balance by either cholinergic rebound or dopamine-mediated effects on nigrostriatal pathways (19). Such alteration might account for the appearance of certain neuromotor signs characteristic of glutethimide withdrawal, such as facial grimacing and myoclonus.

Of further interest is the observation that some antihistamines inhibit dopamine reuptake by striatal neurons, and this rather than their anticholinergic effect may be the reason for their beneficial effect in parkinsonism (20). Prolonged use of antihistamines has recently been reported in association with oral-facial (tardive) dyskinesias (4), the mechanism of which has been theorized to be alteration of central dopaminergic pathways by blocking reuptake of dopamine by individual neurons (5). Moreover, the caudate nucleus appears to be involved in the production of experimental catatonia, and dopamine receptor blockade has been proposed as the mechanism of action of neuroleptics that produce catatonia in animals and a parkinsonian syndrome in man (19).

These observations are especially pertinent to this case report, since it is likely that additive or interactive effects of the glutethimide and antihistamines led to significant alteration in the metabolism of dopamine and reduction in its intracellular concentration. The catatonialike phenomena may thus be related to prior inhibition of dopamine reuptake by striatal neurons with subsequent receptor hypersensitivity or hyperstimulation, analogous to the mechanism proposed in the production of experimental catatonia. Such a neurochemical withdrawal state would be more likely if long-term use of glutethimide contributed to altered dopamine metabolism than if the antihistamines alone did so, especially since the antihistamines were used relatively briefly in this case.

Withdrawal Dyskinesias

It is worthwhile to compare glutethimide withdrawal reactions with those caused by other drugs. Facial grimacing is reported in association with abrupt discontinuance of butyrophenones, and one patient developed severe choreiform movements of the arms and legs along with facial grimacing (2). The relatively mild and reversible oral-facial dyskinesias appear to be more analogous to an acute "withdrawal" dyskinesia than to a tardive dyskinesia (2). Other neuroleptic withdrawal symptoms have also been described, and an akathisialike syndrome reportedly can occur with imipramine withdrawal—possibly due to depletion of or hypersensitivity to dopamine in the central nervous system (3). Another paper (6) described a case of athetoidlike flexor-extensor movements of the arms and legs occurring with confusion and disorientation in a 47-year-old woman when she successively received hypnotics and phenothiazines for insomnia associated with pentazocine withdrawal. Interestingly, it was noted that pentazocine causes a decrease in brain dopamine in animals; hypotheses proposed for the movement disorder included a dyskinetic reaction or chronic central structural or chemical changes predisposing to these movements when the other drugs were introduced, as in tardive dyskinesias due to biogenic amine receptor hypoactivity (6). Additionally, myoclonus and choreoathetosis seen in cases of tricyclic antidepressant poisoning and reversed by physostigmine (21) support an amine imbalance hypothesis for these movement symptoms.

I have not found any previous reports of drug withdrawal producing catatonialike symptoms. However, catatonia has been reported in association with sustained large doses of L-dopa (22). Catatonic complications also reportedly occur with phenothiazine therapy (23) and should be distinguished from akinesia.

Catatonia

The major components of catatonia are catalepsy (waxy flexibility), negativism, mutism, incoherence, confusion, stupor, and episodic hyperactivity or excitement (24). Nonschizophrenic catatonic states have been described in association with general paresis, epidemic encephalitis, alcoholism, hysteria, hypnosis, diabetes, narcolepsy, epilepsy, mentally defective chil-

dren, psychoses due to "illuminating gas" and aspirin intoxication (7), brain stem infarction, mesencephalitis, arteriovenous malformation, tumors of the thalamus and pineal body, basal ganglia destruction, frontal lobe tumors, hydrocephalus, subdural hematoma, postimmunization encephalopathy, subarachnoid hemorrhage, and the syndrome of akinetic mutism (9). Cortical and subcortical factors appear to be important in the production of catatonia, and an association between catatonia and impaired physiologic function of the anterior limbic region of the cerebral cortex has been proposed (24). While catatonia of organic origin is more commonly seen with lesions of the frontal lobe, there may be other localizations, extending from the brain stem to cerebral hemispheres (8, 9). Usually lesions fall into one of four anatomical areas: brain stem, basal ganglia, ascending reticular formation, or frontal lobes and limbic system (9). A dramatic and lethal form of catatonia resembling catatonic schizophrenia (fatal catatonia or Stauder's catatonia) may be due to viral encephalitis (25). The possibility of activating a catatonic psychosis with amphetaminelike psychostimulants in otherwise nonpsychotic subjects is rare, although high doses may produce a paranoid psychosis, the mechanism of which may lie in effects on central dopamine (26).

A recent review (27) of differential elements in the examination of patients in a catatoniclike stupor summarized the findings of Joyston-Bechal (28) in 100 cases of stupor, stressing the role of the psychiatrist in mental status testing and emphasizing the fact that every catatonic patient requires a diagnosis.

CONCLUSIONS

Facial grimacing and a catatonialike psychosis may falsely suggest the diagnosis of schizophrenia associated with an antipsychotic-drug-induced dyskinetic reaction. Medications such as antihistamines for treating dystonic reactions, however, might exacerbate what is actually a withdrawal syndrome, possibly due to mutual effects on dopaminergic pathways. The association of a catatonialike state with the withdrawal of glutethimide and the use of antihistamines is compatible with the apparent role of striatal or ascending reticular formation elements in catatonia. Usually features of the glutethimide withdrawal syndrome will alert the physician to the correct diagnosis. The syndrome may occur unexpectedly, however, and caution in the use of glutethimide is recommended.

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Patients' Expectations of Therapeutic Improvement and Their Outcomes

BY SIDNEY BLOCH, M.B., PH.D., GARY BOND, PH.D., BRANDON QUALLS, M.D., IRVIN YALOM, M.D., AND ERIK ZIMMERMAN, M.D.

The authors studied the relationship between patients' expectations of therapeutic improvement and their actual outcomes after 8 and 12 months of group psychotherapy. Using patients' self-evaluations and assessments by therapists and independent judges, they found a positive relationship between expectations and outcomes only when assessments were derived from patients. The authors discuss the possibility of a continuing expectational set in patients toward psychotherapy.

THE ASSERTION by Fiske and associates (1) that in psychotherapy "expectancies are always present in both therapist and patient" is indisputable. Their companion statement, however, that "positive expectancies seem to be a necessary condition for therapeutic effectiveness" is enveloped with uncertainty and controversy. In two excellent reviews (2, 3) Wilkins contended that the evidence for the strong influence of patients' expectations of therapeutic improvement on their actual outcomes is slender and that the significance of patients' expectations in determining outcome is more a popular belief than an established finding of research.

A review of the studies on the issue lends considerable to support Wilkins' argument. The data emerging from both approaches to the question—the correlational approach, in which the relationship between measures of patients' expectations and their therapeutic outcomes are examined, and the experimental approach, in which procedures are introduced to modify patients' expectations, either increasing or decreasing them, and examining respective outcomes—are conflicting, sometimes even contradictory. The studies adopting a correlational approach (4–11) have found either a positive linear (4–7), a curvilinear (8), or no relation (9–11) between expectation and outcome variables.

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The purpose of this paper is to report the results of research applying the correlational model in which efforts were made to overcome several of the obstacles that haunt almost all previous studies. The most critical obstacle has been the method of assessing therapeutic outcome. All of the studies cited, except one in which therapists' assessments were used (10), used some form of patient self-report alone. None used a source of assessment wholly independent of the therapy provided. Thus only one study has recognized the importance of relating the expectations of patients to a measure of outcome derived from a source other than the patients themselves. It is generally agreed that patient self-report is too vulnerable to the bias of the patients, who frequently have a need to please the therapist, to satisfy their own predictions and anticipations, or to justify their investment of time, energy, and money in the therapy. Therapist-based assessment is similarly vulnerable to a bias to see improvement.

The expectation variable has been measured in several differing ways, which undoubtedly has contributed to the conflicting research findings. Commonly, the difference between patients' present and expected self-ratings on a symptom checklist has served as an indicator of expectations. By contrast, Brady and associates (10) relied on patients' replies to two projective tests, and Uhlenhuth and Duncan (7) obtained a measure of patients' general optimism about probable outcome of therapy on a simple 7-point scale.

The clinical populations selected and the quality of psychotherapy given to patients have also varied considerably. The patients studied have ranged from psychotic inpatients (10, 11) to outpatients with neuroses and personality disorders. Several of the outpatient-based studies have not described at all the nature of the patient sample, thus precluding any comparisons between research reports. Only in a minority of studies has a substantial period of psychotherapy been provided to the patient. The range has extended from a single interview session to therapy lasting 6 months, but most therapies have not exceeded more than a few weeks. Further, the therapists used have varied from medical students to experienced clinicians, making comparability on this dimension impossible.

Our objective in this project was to test the relationship between patients' expectations and their therapeutic outcomes by paying particular attention to the measurement of these two variables, to the duration

and quality of psychotherapy offered, and to the selection of the sample. Our plan was to measure expectations in as specific a manner as possible, to measure outcomes by an independent source in addition to patient and therapist sources, and to study a clinical sample with neurotic and/or characterological problems who were undergoing conventional long-term outpatient psychotherapy.

METHOD

Clinical Sample

The therapists of six long-term psychotherapy groups in the Stanford University Department of Psychiatry were asked to refer all consecutive newly accepted patients to the study before their initial therapy meeting. Data on 36 patients were collected over a 6-month period in this way. All 36 patients consented to participate in a project designed to "study their progress in group therapy."

Of the 36 patients, 27 were followed for an 8-month period and 21 for 1 year. Nine patients dropped out of the study early by terminating therapy, most within the first weeks. The attrition between 8 and 12 months was due to 3 patients who terminated therapy because they considered themselves to have achieved their goals and 3 patients who terminated because they had given up. Of the 27 patients studied over the 8-month period, 16 were men and 11 were women. Their ages ranged from 21 to 55, with a mean of 33.6. They were all outpatients who were attending group therapy weekly and who had a neurotic and/or characterological disorder. Fourteen patients had a drinking problem as a prominent component of their disorder and were members of groups especially created for patients with drinking problems. It is important to note that problem drinking was only one facet of the clinical presentation of these 14 patients. In most respects they were clinically similar to the other patients in the sample. The groups functioned along the lines of a conventional group for neurotic-type patients except for an additional focus on alcohol (12, 13).

Measures

Patients were clinically interviewed by one of two experienced psychiatrists (S.B., B.Q.) before their entry into group therapy. The product of these interviews was a delineation of the problems the patients wished to work on in their therapy. There was an average of 4.6 problems per patient, with a range of 2 to 9. Commonly cited problems were depression, tension, an inability to achieve intimacy, a specific problem in interpersonal relationships (most commonly marital), purposelessness, difficulty in identifying and/or expressing feelings, and low self-esteem.

For each problem, the patient defined the goal that he or she wished to reach by the end of therapy. Usually this was the converse of the problem, e.g., more pleasure from life, a sense of self-worth, resolution of an interpersonal conflict, or intimate relationships with others.

For each listed problem and associated goal, patients rated the extent to which they expected to achieve that goal through work in therapy on a 9-point scale, with defined points ranging from "not at all" to "totally."

After 8 months patients were interviewed again by the same psychiatrist, and the original constellation of problems was reviewed. Patients then rated the degree to which they had achieved each of the original goals on a 9-point scale, with the same defined points as the scale for expectations. No mention was made of the original expectation ratings obtained 8 months earlier. An identical procedure was followed 4 months later. Both the expectation and outcome variables were the average scores of a patient's ratings on all of his or her problems. All interviews were videotaped with the patient's knowledge and consent.

Before therapy was started, the therapists formulated their patients' clinical problems and selected 3 main problems that they intended to tackle in the treatment of each patient. Eight and 12 months later, the therapists rated each patient's level of change on each of these problems on a 9-point scale, with defined points ranging from "worst possible outcome" through "unchanged" to "best possible outcome." The mean ratings of change on the 3 problems at each follow-up time were used as the therapists' two measures of outcome.

Forty-two members of the clinical faculty of the Stanford University Psychiatry Department, all of whom were experienced psychotherapists in clinical practice, volunteered to view the videotaped patient interviews. Teams of three judges were formed according to their availability to observe the two or three videotaped interviews (the number varied according to how long the patient remained in the study) at one sitting. After observing the pretherapy interview, each team through consensus agreed on a list of problems that they would tackle were they treating the patient and the associated goals toward which they would work. The judges subsequently viewed the interviews taped at 8 and 12 months and reached agreement on the rating of change for each of the listed problems on a scale identical to that used by the therapists. Again, the mean ratings of change at each time were used as the two outcome measures for the independent judges.

RESULTS

Spearman rank correlations were computed to examine the relationships between the patients' average expectation scores and their average achievement scores at 8 and 12 months and between their average expectation scores and the measures of outcome of the therapists and independent judges obtained at those times. Table 1 presents the correlations and their levels of significance. It demonstrates the marked rela-

TABLE 1
Spearman Rank Correlations Between Patients' Expectations of Improvement and Three Measures of Outcome 8 and 12 Months After Commencement of Therapy

Source of Outcome Measurement	Correlation, by Time of Follow-Up	
	8 Months (N=27)	12 Months (N=21)
Patient	.47*	.45**
Therapist	.04	.29
Independent judge	.23	.19

*p<.005.
**p<.02.

tionship between the patients' expectations and their own assessments of outcome both 8 and 12 months after therapy started. By contrast, the patients' expectations are totally unrelated to outcome when measured by either therapists or independent judges at both times of follow-up. Scattergrams drawn for the latter pairs of variables showed no particular pattern; there was no evidence of a curvilinear relationship between patients' expectations and outcome.

DISCUSSION

Expectations are related to outcome only when the latter is assessed by the patients themselves. This finding is not inconsistent with the result of previous research in which patients' self-reports were the only outcome measure (4–7). The absence of any relationship between patients' expectations and therapist-assessed outcome is a replication of the results of Brady and associates (10). (It should be noted that because their population and methods of measurement were different from those in the present study, direct comparison is not entirely warranted.) Since to our knowledge no other researchers have used either therapists or independent judges as sources of outcome measurement, our comparisons must be limited to the data of Brady and associates.

In his review of the literature (3) Wilkins argued for an independent source of outcome measurement and was critical of investigators who did not include such an objective measure of improvement. In the present study we heeded his advice by incorporating two sources of outcome other than the patients themselves. In the case of both sources we found no evidence for their relationship with patients' expectations.

The question arises as to why there is a positive relationship between expectations and improvement only when the patient is the source of outcome measurement. Memory is unlikely to be a factor. In some previous studies, in which the duration of therapy was only a single session, it may well be that the patients reported the outcome they had predicted for themselves, i.e., they satisfied their predictions by being able to recall what they had originally anticipated. By contrast, in the present study several ratings of expectations were completed by the patients at one time only, they were at no stage reminded of what these ratings were, and the outcome measures were obtained after several months.

What appears more likely is that both the measurement of expectations of improvement and the assessment of actual improvement are derived from a similar source in the patient. Possibly, patients enter therapy with certain expectational sets that determine thereafter how they perceive their progress and ultimate outcomes. No matter what occurs in the therapeutic process or what changes in patients are actually achieved, they maintain a particular, consistent attitude toward their progress in therapy. Thus some patients reporting a successful outcome are perhaps manifesting their continued faith in therapy or their need to please therapists (and researchers as well) or their continuing need to maintain their belief that rescue is still possible. By contrast, some patients reporting a poor outcome for themselves are possibly demonstrating an element of their psychopathology—a basic, pervasive pessimism about change for themselves.

The data from this study are insufficient either to confirm or refute the hypothesis that the measures of patients' expectations of improvement and patients' assessments of improvement originate in some common factor. Further research could explore this possibility by attempting to identify and study closely various expectational sets in patients as well as the criteria by which patients assess themselves on outcome.

In the interim, we are left with the finding that there is no relationship between patients' expectations and two external measures of outcome. This finding supports Wilkins' point that it is indeed more a popular belief than a confirmed research finding that patients' expectations of improvement affect their therapeutic outcomes.

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Attitudes of Psychiatric Residents Toward Payment of Psychotherapy Fees

BY BARNETT S. MEYERS, M.D.

A preliminary exploration of psychiatric residents' thinking on the subject of psychotherapy fees revealed a pattern of inconsistencies in attitudes and a divergence between attitudes and practice. The author discusses these findings in the light of theoretical considerations and the effect of such attitudes on clinic administration and patient treatment. He emphasizes education about and discussion of fees as important aspects of residency training.

THE RECOGNITION of the theoretical and clinical significance of the fee for service in dynamic psychotherapy has been a major contribution of psychoanalytic thinking (1). Despite this, there is a singular dearth of material in the literature concerning the study or discussion of the attitudes of psychiatric residents toward their patients' fees, although Pasternack and Treiger (2) addressed this subject in a recent paper, noting the "questionable" fee-setting practices of residents. These authors discussed the educational and administrative procedures that were developed to deal with this situation. The resident's difficulties in dealing with the financial aspect of the therapeutic situation are often manifested by his failure to discuss the subject during supervisory sessions. One frequently discovers that the resident has "forgotten" to record process notes of the session in which the fee was discussed.

Freud's warning that "money matters are treated by civilized people in the same way as sexual matters—with the same inconsistency, prudishness and hypocrisy" (3, p.131) remains relevant here. In consonance with modern society's apparently liberal attitudes toward sexuality, patients, residents, and supervisors now find the discussion of frankly sexual material both more comfortable and appropriate. Underlying transference and countertransference conflicts are more directly manifested in the continued aversion to the subject of money.

This aversion is augmented by the fact that psychiatric residents can easily rationalize that patients' fees have little to do with their own incomes, material sustenance, or "professional concerns" for patients. This "fantasy" is enhanced by the commonly shared first-year inpatient experience in which payment for service is negotiated between the hospital and the third-party payer. The resident enters his/her outpatient years relatively "pure" of monetary contamination. It is strikingly ironic that reimbursement for service does play a major role in the support of all services on which residents receive training. This has become increasingly true with the cutbacks in National Institute of Mental Health funding.

An interesting paradox is that the resident does not have easy access to the "my standard fee" solution used by many private practitioners. (Furthermore, one wonders to what extent this solution serves to protect senior practitioners from dealing with issues that were not resolved during their own training.) Most commonly, the training facility, having a public institutional base, is required to use sliding scale fee schedules for ambulatory patients in addition to accepting Medicaid. The flexibility of the sliding scale and the no-direct-payment aspect of Medicaid would seem to be ideal ve-

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hicles through which trainees could be helped to understand their attitudes about their patients' fees as well as the role such fees play in psychotherapy. The present study was designed with this in mind. The hope was that this rather preliminary survey would itself open up monetary attitudes and practices as subjects for discussion.

PROCEDURE

A questionnaire was distributed to 2 different second-year groups totaling 15 residents and 1 group of 5 third-year residents as an "inquiry of residents' feelings about the clinic fee structure and how it might be changed." The questionnaires were completed early in each of 2 successive academic years. Residents were asked to estimate the average fees they were charging their patients. Other questions asked for personal preferences among various mechanisms for fee setting and collection. Data were also collected and studied to compare the residents' responses to the questionnaire with their actual fee-setting and collection practices.

RESULTS

Although the study was not designed to elicit statistically significant data, specific trends in attitude and practice did emerge. The survey revealed that 15 (19%) of the 77 non-Medicaid patients seen during the month of the initial sampling were not being charged a fee, despite the minimum fee of $3 per visit as determined by the sliding scale schedule. These no-fee patients contributed to the fact that the average estimated fees for second-year residents were more than triple the actual fees and the estimated fees for third-year residents were more than twice the actual fees.

All of the 14 residents on the service at a particular time were found to have at least 1 patient, and 4 residents had at least 4, who had not paid their set fees in over a month. One resident had 10 patients who were more than 6 weeks in arrears, with a balance totaling more than $400.

Among the attitudinal trends, 3 of the 20 residents stated a preference for treating patients receiving Medicaid to either no-fee or paying patients. One of these residents commented on not feeling "competent enough" to directly charge patients for therapy. A fourth resident preferred treating patients for whom there would be no fee at all. Three of these 4 residents who preferred no direct reimbursement also preferred having the receptionist set the fee rather than assuming this responsibility themselves. Of the other 16 residents who preferred fee-paying patients, 15 preferred to determine their patients' fees themselves. Nevertheless, 19 of the 20 residents studied still preferred that fees be collected by the receptionist.

Despite the sliding scale schedule and the clinic policy that fees be determined by the patient's financial situation, 4 residents felt that their fees should be lower than those of the nontrainee staff, 4 felt that with each year of experience a trainee's fees should increase, and 4 felt that residents' fees should be higher than those of trainees in other disciplines. Finally, there was a universal and gross underestimation of the clinic's reimbursement rate from Medicaid.

DISCUSSION

The study did confirm the hypothesis that there are conflicts and inconsistencies in residents' attitudes toward psychotherapy fees. The trends toward unawareness and avoidance of financial issues were reflected by the fact that all of the residents grossly overestimated their average fees and all had at least 1 patient who had not made payments in over 30 days.

It is interesting that while 15 of the 16 residents preferring fee-paying patients wished to set their own fees, 19 of the 20 residents surveyed preferred having the receptionist collect the actual fee set. This apparent paradox may be due in part to the clinic policy, which encourages therapists to set their own fees. It is enhanced by a dynamic phenomenon that makes it more comfortable to set a fee with a patient than to collect it. Given an option, 95% of the residents chose to delegate the latter responsibility.

The attitudes and practices demonstrated by this study point to the administrative, educational, and clinical difficulties involved in clinic management at a training facility. The suggestion is that the best mechanism to deal with these issues is an educational approach. Particular emphasis must be placed on the myriad transference-countertransference aspects of the patient-therapist financial interaction. One common example is the patient who needs to be indebted and who may resent the sense of bondage while simultaneously receiving sadomasochistic gratification. Obviously, the patient may be simultaneously expressing conscious appreciation for the therapist's "indulgence." Nevertheless, transference and countertransference feelings increase as the debt mounts until the patient discards the manipulated and denigrated therapist or the therapist's own anger at feeling controlled surfaces in an abrupt ultimatum resulting in the termination of therapy.

Another possible interaction is the patient's acting out, in collusion with the therapist, of a wish to cheat the clinic through nonpayment or underpayment. This phenomenon is common in the treatment of patients with sociopathic difficulties. The dynamics often involve an unconscious wish to be nurtured by the therapist-mother and the related acting out of the need to feel special. These reactions are more common in patients who have suffered early maternal deprivation, are narcissistic, and have characteristics of the "psychology of the exception" (4). Gedo (5) has conceptualized nonpayment in a somewhat different way. He sees it as often being a manifestation of a transitional

phenomenon in that the unpaid money becomes an intermediate link between the "me" patient and the "not me" therapist.

Finally, a common syndrome exists in which patients use residents' countertransference rescue fantasies or guilt about money for the purpose of blackmailing them to remain silent about financial issues.

The important and central theoretical and clinical points here are that regardless of meaning, when a patient directly or indirectly refuses to pay an appropriate fee and the therapist ignores this the two are mutually denying a significant piece of reality and the therapy is sabotaged.

Issues related to the technical management of financial aspects of the resident-patient relationship should certainly be the subject of discussion during supervisory sessions. (The question of personal therapy for residents and its effect on their practice is also relevant here.) Nevertheless, the mutual denial by patient and therapist that there is such an issue undermines the supervision and thereby the patient's treatment.

CONCLUSIONS

This survey confirmed the impression that psychiatric residents tend to avoid the monetary aspects of psychotherapy. Educators can play a significant role in both the improvement of training clinic finances and the broadening of resident growth by more actively addressing themselves to this area.

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Inspiration of Psychotherapists by Patients

BY EDWARD MESSNER, M.D.

Many patients possess such exemplary traits and virtues that their psychotherapists are inspired to emulate them. This process can benefit the clinician and reinforce the therapeutic alliance, rapport, and the spirit of reciprocity; however, it can also arouse responses by the clinician that are therapeutically detrimental. Awareness of this hazard can enable the clinician to avert it and enhance the benefits provided by the patient's outstanding strengths.

MANY PATIENTS possess splendid traits of character and exceptional qualities of personality. The psychotherapists who encounter these exemplary features may adopt them as models for their own behavior. They can evoke in the therapist a degree of admiration and respect leading to a conscious desire to acquire the patient's virtues.

Examples of such traits are loyalty; perseverance in overcoming personal handicaps; energy, determination, and effort in pursuing a goal; verbalization and vocalization of intense emotion while forbearing from enactment of their corresponding impulses; and dignity in meeting enormous stress. Every experienced clinician could probably compile a similar list.

RELATED PHENOMENA

Although countertransference, identification, and learning may occur along with inspiration, they are different processes. Countertransference is a therapist's emotional response or reaction to a patient that is not entirely conscious and includes some elements inappropriate to their current relationship (1, 2). Identification is a form of automatic modeling or imitation, the most significant elements of which are not available to consciousness (2). Learning is a process of acquisition

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of knowledge, skills, or concepts. Inspiration, in contrast, is a process that is largely available to consciousness and includes strong elements of motivation, energy, and desire. The phenomenon of inspiration of the therapist may be classified as part of the nontransference aspect of the relationship with the patient (3). It is also one of the psychotherapist's sources of personal enrichment and development (4).

I reviewed the literature on countertransference and other subjective experiences of psychotherapists, covering approximately 70 publications from 1924 to 1976, and found no reference to the phenomenon of inspiration of the therapist by the patient.

CLINICAL CONSIDERATIONS

One of my patients, a man who developed a severely crippling physical handicap in childhood, exerted enormous effort to become autonomous and competent. Eventually he not only became the source of financial support for his impoverished family but also provided encouragement and love. I had not previously encountered, directly, anyone who had accomplished so much after starting with so little. His determination was immense. I discovered that I wanted to build my capacity for steadfastness and perseverance to his level.

My admiration for this patient showed in several ways, including nonverbally. Initially, it was helpful to him while he was depressed. Later it became a threat. Admiration was associated with warmth, warmth with closeness, and closeness evoked the spectre of loss. Loss and bereavement were crucial to the problems that had brought him to therapy. Consequently, my profound respect served to complicate the therapy.

Following my recognition of the countertherapeutic effects of my admiration, we were able to discuss it explicitly. This impediment to progress subsided, and he moved ahead even more. He developed the ability to receive as well as to give. He was eventually able to gain satisfaction from close personal relationships and from greater acceptance of himself. Favorable effects of therapy were evidenced by the patient's own observations, several events and relationships in his life, my opinion (obviously vulnerable to bias), and the views of an important relative who loved him but saw him only occasionally because of geographical separation.

COMMENT

The inspirational experience may be beneficial to the therapy as well as to the therapist. It can serve to strengthen the therapeutic alliance. It can also reinforce the emotional atmosphere of reciprocity and togetherness (4). In these ways it may reflect favorably on the patient.

In other ways the inspirational experience may prove detrimental to the patient. It can provoke a sequence of gratitude, obligation, and resentment in the therapist. In some clinicians, it can stimulate rivalry with the patient. It can also arouse feelings of admiration in the therapist that may lead to unfounded expectations of strengths in other areas of the patient's personality. In addition, inappropriate application of these standards of conduct and character to other patients may have an adverse impact. The inspirational virtues may also arouse envy and defensive comparisons in the clinician. This might lead him to emphasize, inappropriately, his own superiority in other areas.

This article was reviewed in preparation by Dr. Aaron Lazare, an Associate Professor of Psychiatry at Harvard Medical School and a skilled and experienced psychotherapist. Since the inspirational phenomenon is a part of many therapists' clinical experience, Dr. Lazare wondered why it has not been described previously. He conjectured,

> Perhaps in our role of therapists we are unwilling to acknowledge that we can be inspired by a patient or influenced by a patient in ways that cannot be explained by neurotic processes. How can a patient help us with personal enrichment and development other than by our being able to cure his neurosis or understand our countertransference difficulty? In sum, perhaps the patient's inspirational impact on us is too simple, too direct and too threatening to our role for us to see it. We may, then, react in ways that might prove detrimental to the patient. (5)

CONCLUSIONS

Psychotherapists need to be alerted to the appearance of inspiration just as they must with other clinical phenomena such as countertransference, transference, and identification. Particularly at times of difficulty in therapy—e.g., periods of turmoil or of stagnation—the clinician might do well to include inspiration in his mental checklist of possible causative factors. The clinician's awareness of hazards offers the possibility that they will be anticipated, neutralized, or overcome. Similarly, the beneficial effects of the inspiring virtues can be shared, reflected to the source, expanded, and enhanced.

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Patient and Staff Reactions to a Strike by Essential Hospital Employees

BY GEORGE L. HOGBEN, M.D., AND ROBERT SHULMAN, M.D.

The authors sampled the feelings and attitudes of patients and staff toward an 8-day strike by 2,500 health care employees of a metropolitan hospital. The strike had a major impact, and most respondents felt angry at one of the parties of the strike. Sympathies toward the strikers and the hospital management were equally divided.

ON NOVEMBER 5, 1973, District 1199 of the National Union of Hospital and Health Care Employees conducted a strike against 40 hospitals and nursing homes in New York City. This action removed 2,500 of the 4,800 full-time employees from the Mount Sinai Hospital, a 1,100-bed voluntary hospital. The operation of the hospital was severely jeopardized as a result of the strike by employees from service, maintenance, technical, clerical, and professional groups. Striking workers included practical nurses, nursing aides, food handlers, patient-transport personnel, janitorial staff, engineers, operating room and laboratory technicians, and clerical staff.

The hospital management estimated that emergency planning could maintain curtailed hospital functions for 10 days. The hospital was closed for all admissions except extreme emergency cases, and a 100-patient-per-day discharge rate was established. All nonprofessional support personnel were redeployed to staff direct patient services. Volunteers were also placed into vital service and support areas. The professional staff established a shift plan, and all leave and days off were cancelled. Implementation of the plan required the availability of essential supplies and the maintenance of staff and patient morale. Sufficient quantities of food and patient-care items were stockpiled. Oxygen was delivered without incident. Oil deliveries were slowed, however, and most deliveries were made under angry verbal protest by the strikers.

Initially, morale among the patients and staff was high. Everyone expected a speedy end to the strike, and a romanticized feeling pervaded the hospital. However, during the third day of the strike it became obvious that negotiations would be prolonged. The already intricate bargaining between labor and management was further complicated by the involvement of the Cost of Living Council as a third party. The Council had been established by the federal government to review the fiscal aspects of all contract settlements. Gradually the mood became grim, tense, and resigned. These feelings prevailed through the remaining 5 days of the strike. The negotiated settlement was completed on November 13, just 3 hours before the last oil supplies would have been exhausted.

This paper reports an attempt to systematically sample the feelings and attitudes of the staff and patients during the strike.

At the time this work was done the authors were with the Mount Sinai School of Medicine of the City University of New York, Fifth Ave. and 100th St., New York, N.Y. 10029, where Dr. Hogben is Assistant Professor of Psychiatry and Dr. Shulman was a third-year medical student. Dr. Shulman is now a first-year medical resident, Newton-Wellesley Hospital, Newton Lower Falls, Mass.

METHOD

The decision to formally question staff and patients was made on the third day of the strike when the overly optimistic mood seemed to change. Separate staff and patient questionnaires were devised to survey feelings and attitudes about the situation and the participants in the strike. The questionnaires were administered during the fifth and sixth days of the strike. Medical and psychiatric ward patients who were not disoriented were asked to complete the questionnaire; mechanical aid was provided for patients who could not write. Staff and volunteers were canvassed from desks in the hospital cafeteria at lunch and dinner meals. These procedures produced 32 completed patient questionnaires, representing about 40% of the medical and psychiatric ward population at the time of the study. Sixty-one staff questionnaires were completed.

RESULTS AND DISCUSSION

Table 1 presents the results of patient and staff responses to the questionnaire. The strike had a major impact on the hospital milieu. Sixty-seven percent of the patients and 72% of the staff felt the situation was extremely or considerably serious, 33% of the patients and 28% of the staff felt it was moderately serious, and none of the respondents viewed the situation as mildly or not at all serious.

Sympathies toward the strikers and the hospital management appeared about equally divided. Of the

TABLE 1
Patient and Staff Reactions to the Hospital Strike, in Percents

Questionnaire Item	Patients (N=32)			Staff (N=61)		
	Yes	Not Sure	No	Yes	Not Sure	No
Sympathetic with strike	58	10	32	64	13	23
Sympathetic with strikers	45	32	23	59	22	19
Angry at strikers	39	11	50	12	21	67
Afraid of being hurt	13	3	84	23	14	60
Afraid visitors will be hurt	42	19	39	—	—	—
Want to leave the hospital	44	3	53	7	2	91
Sad about the strike	70	7	23	76	7	17
Afraid patient care will suffer	28	9	63	78	3	19
Avoid strikers by entering door where none are present	—	—	—	41	8	51
Sympathetic with people entering the hospital	73	13	13	—	—	—
Angry at hospital management	19	9	72	16	9	76
Sympathetic with hospital management	40	13	47	50	29	21
Angry at Cost of Living Council	84	13	3	85	8	7
Sympathetic with Cost of Living Council	0	23	77	0	2	98
Tell strikers to maintain strike	—	—	—	19	12	69
Tell strikers to end strike	—	—	—	19	19	62

staff, over one-half expressed sympathy for the strike and the strikers, and half sympathized with the hospital management. Surprisingly, since their health could be adversely affected by the strike, over one-half of the patients expressed sympathy for the strike, and slightly less than half sympathized with the strikers and the hospital management. Moral and ethical arguments against strikes by health care workers were frequently verbalized during the strike, and official reactions to it were generally unsympathetic. However, the sympathetic reactions of the patients indicate that one-half of the health care consumers sampled in this study did not share the authorities' opinions about it.

The strike action seemed to stimulate angry feelings in most of the patients and staff. Eighty-four percent of the patients and 85% of the staff expressed anger at the Cost of Living Council, 39% of the patients and 12% of the staff at the strikers, and 19% of the patients and 16% of the staff at the hospital management. These findings emphasized the somewhat unusual circumstances created by the direct intervention of the federal government in the strike. While the Cost of Living Council seemed to forestall an earlier termination of the strike, it may well have acted as a focus for hostile feelings and thus have aided in the relatively smooth relationship observed among strikers, staff, and patients. Twenty-three percent of the staff and 13% of the patients were afraid of being hurt by violence. Only 7% of the staff wanted to avoid the strike by leaving the hospital, but 41% wanted to avoid the strikers by entering a door where no strikers were present.

There were no reports of untoward patient care incidents resulting from the strike. However, the patients and staff had different perceptions about the quality of care being delivered during the strike. Thirty-five percent of the staff, compared with only 13% of the patients, felt that patient care was better during the strike. On the other hand, 44% of the patients and 26% of the staff felt that care was not as good as it had been before the strike. The rest of the patients and staff felt that patient care was the same as before. Apparently, receiving care during the serious situation created by the strike reduced the patients' worry that quality of care would suffer, since only 28% expressed this fear. This response is in striking contrast to that of the staff. Seventy-eight percent were afraid patient care would suffer, which suggests that staff members were quite concerned about their abilities to discharge their responsibilities for patients in a crisis situation.

A review of the literature indicated that no data were available about reactions to the few earlier strikes by health care workers in New York City and elsewhere in the country, and thus it was not possible to determine whether the reactions expressed during this strike represented a change in feelings and attitudes about strikes in the health field.

LETTERS TO THE EDITOR

A Reply to a Rebuttal

SIR: I appreciate the opportunity to react to Dr. Kety's response (1) to my commentary (2) on his study of genetics and schizophrenia (October 1976 issue).

Dr. Kety suggests that I have engaged in careless reading of his papers, and documents this suggestion with excerpts from my critique, followed by "answers" from his papers. He opens this documentation of careless reading with a reference to my complaint about having had to guess which statistical test had been used to analyze the data. Dr. Kety suggests that the test was specified by the phrase "p, one sided probability from exact distribution=0.0072" (1, p. 1134). Many readers will join me in wondering *which* exact distribution—multinomial? binomial? Poisson? Fisher's?

Although only readers with a high energy level, high interest, and freedom from "statisticophobia" will check Dr. Kety's "rebuttal" of my position point by point, I would like to offer three guidelines for those who do examine our exchange in detail.

1. Follow carefully the specific references cited under Dr. Kety's heading, "our paper." My commentary applied only to his original study, which contained carefully imposed controls on defining schizophrenics. However, several of the rebuttals come from a subsequent expansion of the original study that added schizophrenic subjects defined on the basis of one interview conducted by one of the authors. I did not and will not now consider this expanded study in my arguments.

2. Note that there was no direct response to my objection that, when all the detail and statistical hocus-pocus is boiled away, the main finding is that the major difference between index and control families occurred in the half-sibling category; thus, the weaker the consanguinity, the greater the "genetic" effect. Dr. Kety appears to respond to this objection with the observation that schizophrenic subjects are more than normally vulnerable to infertility, abortion, and suicide; these factors, he reasons, make it less likely that a diagnosis of schizophrenia would be found in the parent category than in the half-sibling category. One can see how these factors (not to mention divorce) might affect the sibling category but not the parent category as defined in the first study, in which the schizophrenic adoptees studied had obviously already survived the possible problems of parental infertility and abortion. Suicide would not have precluded tagging parental schizophrenia because the diagnosis was made through the population register and hospital records; interviewing living parents was not required. One does need to presume that parental schizophrenia did not *first* appear as suicide, that is, the parent would have had to manifest schizophrenic behaviors to a degree sufficient to establish the diagnosis of schizophrenia before committing suicide. Dr. Kety's original paper indicated that 63 biological parents were located for both the 33 index cases and the 33 control cases. Given this comparability of numbers, and presuming that schizophrenia is rarely initially manifested as suicide, it is reasonable to conclude that the samples of parents for index and control subjects were comparable in availability.

3. Note that my general methodological comment about the research design was transformed by Dr. Kety into a position in favor of an SES interpretation of schizophrenic, which he then refuted. However, my comments on socially adaptive attributes were intended to address Dr. Kety's theme that schizophrenia is associated with a destructive "illness" gene. If this idea is pursued it is important to establish whether contrasts between index and control groups were due to superiority of the control group and/or to inferiority of the index group. One does not need Dr. Kety's additional observations (1, p. 1135) about how many cases were born of married couples to refute a social adaptation interpretation of the half-sibling findings. Moreover, I commented, "this formulation, like the genetic (disadvantage) interpretation, falters because of the failure to find differences between index and control parents. Thus the argument remains at a stalemate" (2, p. 1132).

In spite of Dr. Kety's suggestions of careless reading and invoking of additional information, the fact remains that applying a statistical test which does not violate the independence assumption to the results obtained from the original carefully controlled samples shows that significant differences occurred only in the half-sibling category. Because the parent category did not show a difference between index and control groups, the results cannot be explained by either the genetic advantage (control) or genetic disadvantage (index) hypothesis; nor does a reasonable environmental hypothesis account for the peculiar findings. All we know at present is that a relatively small sample of adoptees showed an understandably high proportion of half-siblings and significantly more half-siblings of the index group had schizophrenia.

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LORNA S. BENJAMIN, PH.D.
Madison, Wis.

On Sexism in the Language

SIR: I have noticed that many authors in the *Journal* have tried to be nonsexist in their use of pronouns. For example, by using "he or she" to describe psychiatrists, authors at-

tempt to avoid the linguistic stereotypes that are rampant in medicine (1).

Unfortunately, phrases such as "he or she," "him/her," "she/he " etc., are extremely awkward to use, especially in speech. The English language has no singular pronouns that encompass both sexes.

Farrell (2) has suggested an alternative, the following "human pronouns," which should become part of the language: 1) "te" (pronounced like "tea") for he or she, 2) "tes" for his or her, and 3) "tir" (rhymes with "her") for him or her.

In addition to avoiding linguistic sexism, these words also have a consciousness-raising effect. Because they are new and unusual, hearing or reading them makes one stop and examine for "tirself" (himself or herself) how easy it is to fall into the trap of sexist use of the language.

It is my fervent hope that the "human pronouns" will be incorporated into the language. As clinicians, scientists, and teachers we can help this process by using these words in everyday conversation (it will take practice) and in the papers we publish.

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KENNETH SOLOMON, M.D.
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Request for Information

SIR: I am attempting to collect copies of journal papers, magazine articles, news items, research projects, professional theses etc., related to the Robert Butler concept of life review. Related material dealing with reminiscing, group psychotherapy, dreams, legacies, and life histories would also be helpful.

I will be glad to send those who provide such information a copy of the bibliography I am compiling on this subject. Please send information to the address below. Thank you for your interest.

CHERYL LIEBERMAN, M.S.W., A.C.S.W.
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Failure of Deanol in Treating Tardive Dyskinesia

SIR: Neurological syndromes associated with the use of neuroleptic drugs in treating psychoses have justifiably caused much concern in recent years. Tardive dyskinesia has proved to be a particularly difficult condition to treat. Deanol is used in tardive dyskinesia on the premise that sustained dopaminergic blockade with antipsychotic agents results in an upset in the dopamine-acetylcholine balance in the basal ganglia and that deanol, a possible cholinergic precursor, may help restore the balance. We would like to report the cases of two patients with chronic tardive dyskinesia in whom deanol treatment was unsuccessful and, in one patient, produced severe side effects.

The first patient was an 89-year-old widower with a 50-year history of chronic psychotic illness diagnosed as paranoid schizophrenia. He had been hospitalized continuously since 1952 and had received hydrotherapy, insulin and electroconvulsive therapies, and numerous antipsychotic agents over the years. Severe orofacial dyskinesia (chewing, sucking, writhing tongue movements) with dyskinesia of arms and akathisia were first noted in 1972 during a hospital-wide neurological survey of all chronically hospitalized geriatric patients. The patient was taken off all neuroleptics for 6 months and from October 1973 on received the following medications: 6 mg/day of haloperidol for 2 months 4 mg/day of benztropine mesylate for 2 months, 20 mg/day of thioridazine for 3 months, 20 mg/day of thioridazine plus 450 mg/day of deanol for 2 months, and 600 mg/day of deanol for 3 months, without any response in the severity of tardive dyskinesia. Further increase in deanol was not possible as the patient developed marked sialism (requiring several changes of shirts daily), bronchospasm, and parkinsonian rigidity. The patient has now been off all neuroleptic medication and deanol for over a year. Over the past 2 years there has been no change in the tardive dyskinesia.

The second patient is an 80-year-old widow who has been continuously hospitalized since January 1972, with a history of schizophrenic illness since 1943. She was treated with electroconvulsive and neuroleptic therapies. Moderately severe tardive dyskinesia affecting lips and tongue, continuous chewing movements aggravated by anxiety, and parkinsonism were noted in November 1972. She was treated with 15 mg/day of chlorazepate dipotassium for 6 months with some improvement, but the tardive dyskinesia returned to the same level of severity when the chlorazepate dipotassium was discontinued. She has been off all neuroleptic medication since 1973. In May 1975, she was started on deanol in gradually increasing dosages up to 800 mg/day. She received deanol for 5 months without any change in her tardive dyskinesia. Over 4 years the tardive dyskinesia has not been progressive.

It may be argued that these patients did not receive large enough doses of deanol. It is also possible that they had neurological dysfunction of an irreversible although nonprogressive nature and that age and chronicity are important factors in therapeutic response. Tardive dyskinesia of milder degree and shorter duration may be more amenable to deanol treatment. In increasing the dose, cholinergic side effects such as salivation, bronchospasm, and parkinsonian rigidity ought to be noted. Controlled studies in the treatment of tardive dyskinesia are urgently needed.

D. MEHTA, M.D.
S. MEHTA, M.D.
P. MATHEW, M.D.
St. Louis, Mo.

More "Craft Versus Science"

SIR: One of the most stimulating things about the article "The Future of Alcohology: Craft or Science?" by Melvyn Kalb, Ph.D., and Morton S. Propper, M.S.W. (June 1976 issue) is that its publication will most assuredly precipitate discussion of the "conflicts and friction between the professionals and paraprofessionals" that the authors feel "have not been allowed to surface."

The article does contain two flaws. First, there is a total lack of historical perspective. If the authors had gone back to the period of 1840 to 1860, they would have found lay and religious groups entangled in the care of the "insane" and

those afflicted with "consumption," and woe to any physician who spoke against either the "moral treatment of the insane" or the doctrine of "fresh air" for what we now know as tuberculosis.

Physicians typically arrive at the scene of a health problem and find some nonprofessional individual or group in charge. If the problem has been neglected for decades, the physician will find a group of crusaders, some of whom will be "exes," caring for the ill according to some simplistic doctrine, be it "fresh air" or "don't take the first drink."

To look at the evaluation of the treatment of the mentally ill and the tuberculous patient and then to predicate a rigid dichotomy of craft or science for alcoholism is to ignore history to the point of being foolish. Ex-alcoholics were there before we arrived on the scene. Some of them are highly trained physicians, like the ex-tuberculous physicians who taught me, and are capable of analyzing sophisticated research data and translating this into training material for the paraprofessional.

The ex-alcoholic of 1976 is not the ravaged person of 1946. He or she might be someone with a master's degree working on a doctoral degree, all since having stopped drinking. The possibility that it might be necessary to employ an ex-alcoholic with no special training in the field is becoming less and less common. Describing the ex-alcoholic as some sort of unintelligent lout clinging to misguided notions about alcoholism and totally oblivious to new information is a bit off the mark.

I have many serious concerns about the alcoholism field as I watch it repeat the history of the mental health movement of the 1950s and 1960s, but the domination of paraprofessionals over professionals is an issue that, while real in some areas, is not having an unusually harmful effect on treatment. The field of alcoholism is moving down its tributary into the mainstream of the health care delivery system. Who the captain of the ship will be is still in doubt, but one of his/her qualifications will not be to have been an alcoholic.

THOMAS T. FLYNN, M.D.
Jefferson City, Mo.

Dr. Kalb and Mr. Propper Reply

SIR: It seems that Dr. Flynn is criticizing us for not having written an entirely different article. Insofar as we are able to discern the issues in his letter, Dr. Flynn seems to assert that a historical perspective would reveal that the current situation in the field of alcoholism is an analogue of the early development of a scientific problem-solving enterprise. He also seems to have misperceived our paper as an attack on the character and intelligence of recovered alcoholics.

The struggle over "moral therapy" referred to by Dr. Flynn was an extremely complicated issue that marked the infancy of modern psychiatry. We do not believe it is reasonable to argue that the struggles and conflicts that characterized the infancy of psychiatry as a scientific enterprise should be accepted as the norm for the current level of dialogue regarding serious problems in the field of alcoholism. If anything, the similarities between the acrimonious political machinations that characterized the struggle over the treatment of the "insane" in the 1800s and the ferment in the 1970s over the role of scientific research in clinical alcohology tend to underscore the very problem discussed in our article.

Dr. Flynn makes unsupported assertions concerning the differential characteristics of "ex-alcoholics" in the 1850s, the 1940s, and the present. Apparently these assertions are meant as a response to some imagined denigration of the "ex-alcoholic" paraprofessional in our paper. We most earnestly disavow any such implications. Our article in no way attempted to evaluate the present clinical effectiveness of the paraprofessional in the alcoholism treatment field.

Finally, Dr. Flynn states, "the domination of paraprofessionals over professionals is an issue that, while real in some areas, is not having an unusually harmful effect on treatment." Our entire article was a documented refutation of this premise.

MELVYN KALB, PH.D.
MORTON S. PROPPER, M.S.W.
Sunnyvale, Calif.

Correlation or Causation: Neuropathophysiology and Autism

SIR: In "The Syndrome of Autism: A Critical Review" (June 1976 issue) Edward M. Ornitz, M.D., and Edward R. Ritvo, M.D., provided a good review of current research, but they also made several assumptions about autism and the early childhood psychoses that are unwarranted by the clinical and research evidence presented. If these assumptions are accepted, they may inhibit important lines of more psychodynamically oriented research and treatment.

The authors' foremost unwarranted assertion is that "symptoms [of autism] are expressive of an underlying neuropathophysiologic process." This statement suggests that a neuropathophysiologic process is etiologic. I wish we could know this with certainty, but unfortunately the data cited derive almost entirely from studies of children who have been living with the stress of the psychosis for months and years. It is reasonable that these stresses and other secondary effects of the illness may produce the deviations from normal on the parameters studied. A striking example of how this can occur is the recently identified syndrome of idiopathic hypopituitary dwarfism (1), in which children who have experienced emotional deprivation and physical abuse and often have lived in many different foster homes were found to have bizarre behavior (including stereotypies) and short stature, with depressed pituitary function and growth hormone levels that rebounded with emotionally nurturing hospitalization.

Thus it would be more accurate to present the research findings the authors reviewed as correlations with autism from which we can only draw inferences to be tested. Drs. Ornitz and Ritvo also stated that "no known factors in the psychological environment of a child can cause autism." I recently reported a case in which home movies showed a mother repeatedly turning the infant's face and eyes away from hers (2). From 6 months on this child developed the classical autistic picture. This is a kind of specific traumatic interference with biologically rooted attachment that is not necessarily etiologic of autism but is correlated with it.

A third area inadequately discussed by Drs. Ornitz and Ritvo is the potential explanatory power of the intrapsychic experience of autistic children for some of the behavioral symptoms. For example, some stereotypies and motility disturbances can be well explained by inferring autoerotic stimulation and defective body image instead of or as well as inferring an underlying pathophysiologic disturbance. Whatever the cause of autism, the authors omit the importance of trying to understand the child's intrapsychic experience in

framing treatment, which is the psychiatrist's unique area of expertise. In sum, the article is a valuable review of highly important and potentially fruitful avenues of research, but it must be read very critically.

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HENRY N. MASSIE, M.D.
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Drs. Ornitz and Ritvo Reply

SIR: We heartily agree that a critical reading should be given to any review. This is particularly true of a "critical review," wherein authors may all too easily not only exercise their scientific judgments but also espouse their prejudices.

We also appreciate Dr. Massie's calling our attention to the fact that we had not been explicit enough in labeling one of our chief "working hypotheses" as such. Thus, Dr. Massie formed the opinion that our "foremost unwarranted assumption ' is that autism's symptoms are expressive of an underlying neuropathophysiologic process. Apparently we did not sufficiently emphasize that this was simply a working hypothesis, not our assertion. For the record, we would like to quote our article, with emphasis added: "The current state of our *medical art* leads *us* to the following conclusion" (p. 618), and

> Figure 1 shows the *possible* etiological and phenomenological interrelationships among the clinically and behaviorally defined syndromes of autism, primary cognitive and intellectual retardation, and psychologically induced psychoses (severe ego pathology). This *model* is based on the *hypothesis* that the syndrome of autism results from CNS pathology of a specific type. This neuropathophysiology may occur on an idiopathic basis or in *conjunction* with specific diseases of known etiology that affect the CNS.

We would also like to comment on Dr. Massie's opinion that we inadequately discussed the "potentional explanatory power of the intrapsychic experience of autistic children for some of the behavioral symptoms." This was done purposely. As stated in our conclusions, "we have tried to survey those studies which were based upon serious scientific efforts and avoid those which simply expressed opinions" (p. 618). No one is more distressed than we (having both devoted many years to psychoanalytic training and to the treatment of psychotic children by psychodynamically based psychotherapy) that theories of intrapsychic and interpsychic experiences of autistic children remain in the realm of opinion. Unfortunately, they have not led, to our knowledge, to operationally defined hypotheses that have been tested by generally accepted scientific methods.

Dr. Massie noted that we did not review his study and commented on a similar study regarding hypopituitary dwarfism. We were aware of Dr. Massie's work, but we considered the cited references as case reports or pilot projects, which although heuristically valuable were not cited in our article (including our own pilot projects).

We do not wish ourselves, our students, or our readers to be polarized into obfuscatory controversies between "organicists" and "psychogeneticists" regarding the etiology of complex syndromes such as autism. Scientific understanding is achieved only by maintaining intellectual and emotional objectivity, establishing hypotheses, and conducting experiments to determine their validity. Determination of the etiologies of complex syndromes such as autism will not be reached by a single experiment, a series of experiments in one area, or, least of all, by opinionated debates. The answers will come only from diligent scientific investigations from varied perspectives accumulating evidence that stands the test of time, both by replication and by clinical experience. We say "answers" because, when we speak of autism, we must bear in mind that we are dealing with a behaviorally defined syndrome that clinical experience indicates can accompany (or be correlated with) many events. That such events may or may not be etiologic is a point on which we certainly agree with Dr. Massie.

The future holds the answers. Hopefully, humanistic zeal and faithful adherence to the principles of scientific investigation will provide therapies to help our unfortunate patients and their equally unfortunate families.

EDWARD M. ORNITZ, M.D.
EDWARD R. RITVO, M.D.
Los Angeles, Calif.

Organic Brain Dysfunction and Personality Disorder

SIR: I would like to question the conclusions reached by Paul C. Horton, M.D., in "Personality Disorder and Parietal Lobe Dysfunction" (July 1976 issue). Dr. Horton attempts to reason by analogy between phenomena unquestionably characteristic of parietal lobe dysfunction and phenomena he alleges to be characteristic of personality disorder. The "hypothesis" he reaches by this reasoning is that there exists a "relationship between personality disorder and nondominant parietal dysfunction." I would suggest that the phenomena alleged to be part of personality disorder are not present and that, consequently, Dr. Horton's analogies break down, leaving his hypothesis without support.

His first analogy is between constructional apraxia, characteristic of parietal lobe dysfunction, and an alleged inability of patients with personality disorders to "relate transitionally." He goes on to intimate that the ability to relate transitionally consists of two parts: the ability to experience a phenomenon as "soothing," and the ability to "personalize and make an external object such as a blanket or a teddy bear internally meaningful." Clearly, as the author does not state that patients with parietal lobe dysfunction have an inability to be soothed, the proposed analogy here must be to the inability to personalize (except, perhaps, in those with borderline personality disorder). Such patients often have quite stable mental representations, which readily undergo projection, leading in turn to personalization of external phenomena. Unfortunately for these patients, however, their mental representations are often felt to be unloving and/or cruel, and thus "personalized" phenomena are perceived as fearful, not soothing. Although I believe that the inability to be soothed is characteristic of personality disorder, I do not think that the alleged inability to "personalize" is present in personality disorder; thus, this analogy breaks down.

The second analogy is between the anosognosia character-

istic of parietal lobe dysfunction and a "lack of awareness" of illness in personality disorder, which is allegedly unrelated to psychological conflict and "rigidly" resistant to "vigorous conventional psychological approaches." I agree that patients with personality disorder lack awareness, but I do not believe that such a deficit is irreversible or unrelated to intrapsychic conflict. I believe that, although it is difficult, such patients may be brought to an awareness of their illness. Consequently, I think this second analogy breaks down and thus, deprived of support, the author's conclusion that there exists a relationship between personality disorder and parietal dysfunction should be viewed with skepticism.

My purpose in making this argument is twofold. First, I wish to caution others about making an implausible connection between organic brain dysfunction and personality disorder. Second, and most important, I hope to keep others from lending credence to the dismal correlary that patients with personality disorder are truly ill in a neurologic sense and thus not amenable to anything but supportive psychotherapy.

DAVID P. ROHMANN-MOORE, M.D.
Madison, Wis.

SIR: Dr. Horton's article was quite informative and provided much theoretical material worth exploring. However, I take exception to his implication that he has discovered the sine qua non of all personality disorders in a particular brain syndrome.

In effect, the article posits causal connections between parietal lobe dysfunction and the absence of "transitional relatedness" and between the absence of transitional relatedness and the presence of personality disorder. In support of the former connection, Dr. Horton notes that the nondominant parietal lobe is known to handle some functions that would seem to be important in developing transitional relatedness. Regarding the latter relationship, he speculates that if a person lacked transitional relatedness, he might be expected to exhibit symptoms similar to those of personality disorders. Finally, he notes that patients with parietal lobe dysfunction are known to have some of the symptoms of personality disorders, notably lack of insight. Taken together, these observations furnish presumptive evidence for the inference that a person born with a parietal lobe dysfunction is, under certain other conditions, likely to develop some personality disorder. However, the conclusion that the brain disorder is a necessary condition for personality disorder is simply not warranted.

Clinical evidence supporting a link between transitional relatedness and personality disorders has been in general isolated and anecdotal (1). Much of the literature on specific personality disorders actually tends to contravene Dr. Horton's theory. For example, hysterical personalities are noted for their "pseudo-insight" (2). This would seem inconsistent with an organically determined anosognosia, which implies a perseverating denial of problems, while "pseudo-insight" suggests a shallowness or inconsistency in recognizing them. A more serious difficulty is presented by the obsessive patient who, if anything, experiences a pathological *excess* of transitional relatedness (3).

More generally, one may question the propriety of accepting a tenuous diagnostic linkage between a specific neurologic problem and a disorder that is primarily defined through interpersonal coping strategies. I have come across few data in either the diagnostic literature or clinical records that suggest a marked prevalence of chronic disorientation (or associated perceptual problems) among personality disorders, as one would expect with a parietal lobe dysfunction. More to the point, in the section on personality disorders, *DSM-II* (4) specifically prescribes that when "the pathological pattern is determined primarily by the malfunctioning of the brain, such cases should be classified under one of the non-psychotic organic brain syndromes rather than here."

While the phenomenon of transitional relatedness (and its possible organic homologies) is certainly worth investigating as a potential etiologic factor in personality disorders, both our present diagnostic system and the present level of clinical evidence militate against accepting any sweeping hypothesis like that proposed in Dr. Horton's article: "An inability or incapacity for transitional relatedness [with its locus in the right hemisphere] is the psychopathological cornerstone, the necessary . . . condition of personality disorder."

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Dr. Horton Replies

SIR: My thanks to Dr. Rohmann-Moore and Mr. Erard for their comments. Unfortunately, space does not permit a response to all of the issues they have raised.

My article showed isomorphism between salient features of personality disorder and minor parietal lobe dysfunction. Misunderstandings arise if one equates "isomorphic" with "reducible to" and subscribes to the traditional medical perspective that asserts the ubiquitous primacy of cerebral processes (1). We have described the sine qua non of personality disorder as the virtual inability for transitional relatedness (2)—not simply and reductionistically as a disorder of the parietal lobe. There is, in my opinion, much to support the postulation of a specific cerebral cause for well-defined personality disorder. However, the genesis of transitional relatedness, particularly during the first few years of life, requires more study before conclusions can be reached. Coppolillo (3), for example, has described how a mother may impede development of transitional relatedness.

Evidence for a link between personality disorder and inability to relate transitionally is good (2) but not widely appreciated for two reasons. First, the concept of transitional phenomena has yet to find its way into most psychiatric textbooks. The latest edition of the *Comprehensive Textbook of Psychiatry* (4) does not even mention the concept. Second, my associates and I are the first, to my knowledge, to explore the relationship between personality disorder and transitional relatedness. We invite replication. Interested researchers should carefully observe the strictures of *DSM-II* for diagnosis of personality disorder, especially with respect to "deeply ingrained maladaptive patterns of behavior that

are *perceptibly different in quality from psychotic and neurotic symptoms*" (emphasis added). For example, the acting-out but voluntary patient with a "character neurosis" seen in a university outpatient clinic or in psychoanalysis should not be confused with the individual with an antisocial personality disorder seen in a military hospital or prison.

We have shown that those with well-defined personality disorders are unable to develop and sustain psychologically soothing experiences and modes of relating (2, 5). They treat their inner life as concretely and impersonally as they do that of others. Attempts to establish emotional closeness characteristically make them edgy, even panicky. The psychiatrist is hard pressed to find anything such patients regard as sacred and to which he can appeal in forming a working alliance. Some of these patients have a limited capacity for experience in this mode and can be helped to develop the ability. As they become more able to relate transitionally they begin to apprehend the nature and magnitude of their illness (5). Therefore, the likelihood that the unawareness of illness (anosognosia) shown by these patients is related to a primary cerebral disorder does not necessarily preclude experiential modification or compensation (1, 5).

To those who understand the concept of transitional relatedness and have worked extensively with well-defined and severe personality disorder, our hypotheses offer many opportunities for development and testing. For example, one could (if resources were available) compare cortical biopsies of tertiary zones of the minor parietal lobe from personality disordered patients with controls. A cortical aberration in these areas would be consistent with my hypothesis.

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Feedback on the Boards

SIR: There is a hint of turbulence stirring in the psychiatric horizon, as is witnessed by recent letters and articles appearing in the *Journal* that address themselves to the issue of certification and recertification (1–4).

Whether specialty certification is even productive in regard to improving the quality of health care—a raison d'être of the specialty Board—is questioned by Dr. Chase (5), who feels the consequences of this certification may distort an objective view of "the conflict between what protects the public from incompetence and what serves the self-interest of declared certified specialists through exclusivity." Dr. Chase wonders if research could be directed toward finding viable alternatives to certification that would also promise improved specialty care.

Dr. Small (6), who is sympathetic to the Board and who has delineated many of the criticisms and challenges to it, has pointed out one specific criticism—the Board does not supply either adequate or useful feedback with regard to a candidate's performance in either the written or oral examinations regardless of the candidate's grade. The Board and their examinations are virtually a given *fait accompli*, since it is doubtful that viable alternatives to certification are close to hand; therefore, I believe that the Board should now respond to Dr. Small's criticism.

It is a well-established fact that feedback is an effective facilitator in learning, and it is unconscionable that the Board, which prides itself in establishing criteria for professional competence, does not point out the weaknesses and strengths of each of its candidates. It would seem a simple procedure, especially with the assistance of computer technology, for the Board to tell all candidates how they rank among their peers in the tested areas and to offer suggested readings in areas where deficiencies are noted in order to help the candidates improve their skills. This could be done in a way similar to that used in the Psychiatric Knowledge and Skills Assessment Program.

It may even be desirable to set a goal of, for example, 80% of all practicing psychiatrists to be certified, instead of the approximately 60% who took and passed the Boards in 1975. Useful feedback on both written and oral examinations could possibly improve psychiatry's standing in the certification numbers game as long as certification is still a sine qua non for recognized professional competence.

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Editor's Note. We would like to point out that candidates can get feedback on the Boards by writing to Lester H. Rudy, M.D., Executive Director, American Board of Psychiatry and Neurology, Inc., 1603 Orington Ave., Suite 1320, Evanston, Ill. 60201. Feedback includes review of the outcome of the oral portion of the Boards as well as scores and quartiles on both portions of the written exam.

Patient Responsibility and "Free" Psychotherapy

SIR: The experiences reported by James L. Nash, M.D., and Jesse O. Cavenar, M.D., in "Free Psychotherapy: An Inquiry into Resistance" (September 1976 issue) invite comparison with the Canadian situation, where psychotherapy in private practice is free under universal Medicare. Clearly, in the absence of a fee-for-service social context, Medicare patients do not feel like charity cases. For most people, the

knowledge that the government pays the bills prevents a feeling of obligation.

How does the patient who would express his hostility by not paying his bills behave under Medicare? The only way he has to deprive the therapist of his fee is not to come; the government does not pay for missed sessions. Thus most psychiatrists here have made contracts with their patients that include responsibility for attending sessions. If they come, Medicare pays; if they miss sessions (for reasons other than illness or snowstorms), they are directly billed for the time.

Limit-setting of this nature also helps avoid countertransference difficulties, either the resentment of a therapist deprived of income or the need of a therapist to be "giving" by making no demands. Any patient in psychotherapy must meet certain minimum expectations; it is that and not the fee which is the issue.

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LETTERS TO THE EDITOR are welcomed and will be published, if found suitable, as space permits. Like other material submitted for publication, they must be typewritten double-spaced. The letter should not exceed 500 words, including references, unless a special arrangement has been made with the Editor, and they will be subject to the usual editing. Receipt of letters will not ordinarily be acknowledged.

BOOK REVIEWS

Creativity: The Magic Synthesis, *by Silvano Arieti. New York, N.Y., Basic Books, 1976, 429 pp., $15.95.*

The mystery of the creative act has intrigued contemporary thinkers for decades. In this absorbing, thoughtful, and erudite volume Silvano Arieti addresses himself to this issue with vigor and conviction. After critically reviewing the major psychological and psychoanalytic theories of creativity, Arieti proposes his own hypothesis that the creative act encompasses a special ability to synthesize primary process mechanisms with secondary process mechanisms. For this special combination he proposes the term "tertiary process." Although Arieti has advanced this concept in previous articles in *The Intrapsychic Self* (1), he develops his thesis with much greater detail in this work, providing a wide-ranging and impressive discussion that encompasses wit, poetry, painting, music, religion, science, philosophy, and general systems theory.

The discussion of the relationship between creativity and the sociocultural environment is particularly interesting. In this section of the book Arieti addresses himself to the question of why geniuses or specially creative individuals appear at certain times in history, in certain places, and often in clusters. He concludes that a significant synthesis of cultural elements plays an important part in such historical occurrences, but he also points out that the work of genius requires an individual with special creative potential. "Actually," he says, "*the significant synthesis is the creative process itself.* It is so significant and unpredictable as to appear magic. Even when a culture is propitious, the significant synthesis occurs in a very small percentage of its people" (p. 302).

Arieti believes with others, however, that the *potential* for significant creativity is much more frequent than its occurrence. This leads him to a consideration of what he calls the "creativogenic society," that is, the kind of society that enhances creativity in its people. He lists nine sociocultural factors that characterize such societies and discusses the phenomenon of creativity among Jews in modern times as an example of how the creative potential of a group can be inhibited by unfavorable sociocultural circumstances and enhanced by favorable ones. Arieti also presents an eloquent and forceful argument against the traditional assumption that women are biologically inferior to men in the field of creativity, concluding with the following statement:

> The striking disparity in the creativity displayed by men and women should convince everybody, not of the alleged inferiority of women, but of the extent and degree to which women have been mistreated by society. It is fair to assume that, given equal status and opportunities, they would have contributed as much as men. (p. 318)

In the concluding sections of this stimulating volume the author discusses various personality attributes of the creative person and how individual creativity can be cultivated and promoted. Finally, he offers some interesting speculations about the neurology of creativity.

In short, in *Creativity* Arieti presents a thoroughly convincing study of the psychodynamic and sociodynamic factors that enter into the creative process, what he calls the "underlying structure of creativity." In the end, however, the actual source of the "magic synthesis" remains as mysterious as ever: "The creative person remains the keeper of the secret of what makes his personality creative—a secret that he cannot reveal to himself or to others" (p. 412).

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JUDD MARMOR, M.D.
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Knowledge in Action: Communication, Social Operations, and Management, *by Jurgen Ruesch. New York, N.Y., Jason Aronson, 1975, 342 pp., $15.00.*

Jurgen Ruesch, one of the world's experts in communication, has brought forth another book summarizing his methods and bringing his views up to date. His preface, dated August 1974, communicates the primary and secondary lags in the publication process.

I suppose it could be said that there has never been a time since the advent of the written word when a treatise on human interaction was not needed. We know for certain that ours is such a time. *Knowledge in Action* is therefore a timely book. One is unlikely to find a better guide for professionals and others who require the use of knowledge in action.

Man is being impinged upon constantly by communications of all sorts in an ever-increasing complex of people and machines. Almost everyone must perforce feel crowded by the system, particularly by government, by the unwieldiness of procedure of all sorts, and by "the ubiquitous and impersonal computer." How to sort out the material pouring in on us and put an immense knowledge into realistic action has been one of Ruesch's main concerns during his professional career.

Ruesch writes engagingly, and, although there is much of interest in the book, the specialist reader is apt to prefer one or another of the many areas discussed. As a teacher, I was particularly taken with the analysis of the professional versus the amateurish way of doing things (p. 270). Ruesch says that those who are eager to learn and who want to become professionals will readily accept a program of work and restrictions required for indoctrination. If the task is not essential, however, it hardly matters how it is done (the amateurish way), reflecting the fact that only a third of the total population works and only about a fifth of the population may be considered essential in running our civilization. The others are consumers for whom any curriculum can be lax and permissive.

Ruesch outlines the conceivable situations in which action is required as well as how they might be managed, including

making a nuisance of oneself to get some action on the part of an imponderable institution or bureaucracy, e.g., in interactions with computers when one is caught up in one of those automated billing systems. The analysis of transactions with bureaucracy and bureaucrats and of the social games that people play cannot but be helpful to anyone who must cope in these always unusual times.

Ruesch's statement that knowledge in action differs from knowledge in general (p. 302) reminded me of Kant's definition of faith: again and again it is necessary to make a decision on the basis of knowledge sufficient for action but insufficient to satisfy the intellect. Coping with and managing man and machine in our technological civilization is what this book is about. It is a first-rate treatise from which to garner assistance in communication and defining action. The author brings to the exposition a wide-ranging experience in communications, psychiatry, and education to assist people to engage in the right action.

The book is exceptionally well constructed; the typeface is pleasing and the paper is reflective. However, page 242 of my copy failed to print and was blank. The book includes appendices containing methods of procedure for exploration and acting and a glossary of terms. There is a bibiliography of more than 13 pages and a subject and author index of more than 9 pages.

Knowledge in Action could serve as an authoritative text in any of a number of college and secondary school programs. It might even function to break the bonds in the Lilliputian nightmare of forms and formulas. I recall that when we were on the same faculty Ruesch never tired of reminding me that the Roman Empire was run without paper. It is several decades later, and he continues to point a way to survival in the maze imposed on us by the times in which we live.

CHARLES D. ARING, M.D.
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The Psychiatric Hospital Today—A Quality Profile, *by John Mulhearn and Gayle Momeny. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 138 pp., no price listed.*

Measures of quality of care tend to focus on outcome. However, Mulhearn and Momeny state that in psychiatric hospitals caring for long-term chronic illness the structure (wholesomeness of the milieu) and the process (e.g., staff concerns) are of equal importance. The data for this study of public, Veterans Administration, and private mental hospitals were obtained from 366 psychiatric hospitals that submitted questionnaires required for accreditation to the Council on Accreditation of Psychiatric Facilities. The survey data represent 181 public hospitals, 29 Veterans Administration hospitals, and 156 private hospitals and cover the period from November 1972 through November 1974. Seventeen percent of the public hospitals, none of the Veterans Administration hospitals, and 2% of the private hospitals in the study sample were nonaccredited. The authors compare the three types of hospitals on the elements that are considered essential to accreditation.

The data show that the most frequently provided services were those related to therapy. Such services as 24-hour emergency services, medical and surgical services, and pathology services were less frequently provided. The private hospitals generally provided fewer services than did public or Veterans Administration hospitals. On all variables related to the environment, with a few exceptions, private hospitals had a higher rate of compliance with accreditation standards than did public or Veterans Administration psychiatric hospitals. The authors detail the comparative findings and deficiencies in all three types of hospitals.

State hospitals were most likely and private hospitals least likely to have a psychiatrist administrator. There is some suggestion that a higher "quality" level was associated with the presence of a psychiatrist as chief executive: when that was the case, more hospitals, both public and private, had approval for two-year accreditation.

One-third of the public mental hospitals employed physicians with limited licenses to practice, but only a few private hospitals and none of the Veterans Administration facilities did.

Compliance with key safety standards was moderately high; most of the hospitals complied with all key organizational standards. The highest psychiatrist:patient ratios were in private psychiatric hospitals. However, therapeutic personnel:patient ratios were fairly comparable for all three types of hospitals.

In essence, most psychiatric hospitals were found to be better than the generally held opinion of them.

I found this thin volume packed with interesting data; I believe other administrators would agree. The data give a comprehensive overview of psychiatric hospitals as seen from the perspective of fulfillment of accreditation standards during the period 1972–1974. The book is highly recommended for administrators, trustees, and all personnel involved in the auditing process or in the evaluation of psychiatric hospitals.

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Nightmares and Hobbyhorses: Swift, Sterne, and Augustan Ideas of Madness, *by Michael V. DePorte. San Marino, Calif., Huntington Library, 1974, 160 pp., $10.00.*

The very able British psychiatrist and historian Richard Hunter once answered the question of why the history of psychiatry has been neglected with the statement that psychiatry is only in part a medical discipline. He went on to say that philosophical, theological, social, and even literary forces have played their part in shaping it and still do.

Prof. Michael DePorte's thesis in this perceptive gloss on eighteenth-century literature is that the writings of the giant litterateurs of the Augustan era delineate Augustan concepts of mental disorders.

The times of which DePorte, a professor of English, writes comprised the age that gave rise to the notorious Bedlam, where Hogarth, among others of the 96,000 annual visitors, pictured the chaos of passions run riot. The causes of mental disorders were ascribed to an Augustan variant of Newton's widely accepted mechanistic hypothesis of the universe as a self-moving machine governed by physical laws. It followed then that purging, blistering, bleeding, cupping, and beating were the appropriate countermeasures to the "unreasonable" departure of mental disorders from physical orderliness (as the eighteenth century pictured well-being). Hobbes had earlier given credence to the priority of order in *Leviathan*, in which he said, "Without Steddinesse and Direction to some End, a great Fancy is one kind of Madnesse."

In the first 45 pages of *Nightmares and Hobbyhorses*, DePorte presents a précis of the philosophical and literary varia-

tions on the theme that epitomized abnormal psychology in England from 1660 to 1760.

The English malady, or splenism, as it was called, was thought to be the cause of "vapours, hysteric fits, the hyp and melancholy." Dr. Thomas Sydenham contended that the malady constituted fully one-half of all the chronic diseases in England. The essence of this madness was explained by Thomas Tryon. Tryon was an enlightened merchant who inveighed against not only the practice of bloodletting but also the practice of making "a Show of those Unhappy Objects of Charity by exposing them . . . to the Idle Curiosity of every vain Boy, petulant Wench, or Drunken Companion." Tryon believed that the "Soul loseth its distinguishing property . . . and becomes rampant [and] is unchain'd or set at liberty from the dark Confinements of the grosser Sense and Reason." Madness, according to the belief of the day, involved a triumph of fancy over sensation.

The second chapter of the book is titled "Swift: Madness and Satire." It is a 55-page critical essay on Dean Swift, who has been called the most misinterpreted and misunderstood man of his day. Swift—the man of wit, the disillusioned idealist and the congenital misanthropist—is illuminated in the chiaroscuro of his works. Etched by the vitriol of his satire, Swift's metaphors conceal/reveal a scathing political commentary, a mastery of irony alloyed with mordant wit, and, altogether, a skeptical analysis of human frailty.

In his third chapter DePorte devotes 30 pages to Laurence Sterne's "shandeisms," those eccentric journeys written to counteract depression caused by splenism. Of *Tristram Shandy* Sterne said, "If 'tis wrote against anything 'tis wrote, and 'please your worship, against the spleen." Sterne's intentions were consonant with the prevailing beliefs of the eighteenth century. Few men were free from the madness of falsely associated ideas; laughter and wit were "against the spleen."

It is DePorte's reading of Swift and Sterne as exemplars of the beliefs of their period that "whereas Swift has stressed the perversity of madness as a willful departure from the common forms, Sterne takes pains to show the degree to which it arises as a natural response to experience."

Both Swift and Sterne wrote out of bitter personal experience with fits of splenism. In *The English Malady* (1733) Dr. George Cheyne wrote that he "would earnestly recommend to all those afflicted with Nervous Distempers, always have some innocent entertaining Amusement to employ themselves in." This is the advice of a psychiatrist who lived to be 72 despite being a "tun of a man" who weighed 32 stone (448 pounds) and who has been called "the Aberdeen Falstaff."

In our time, when the trend in psychiatric writing grows ever more psychopharmacological, it is indeed a refreshing contrast to read an elegant literary analysis of the ideas of mental disorder that prevailed more than 200 years ago. *Nightmares and Hobbyhorses* deserves a prominent place in the accumulating studies in the history of psychiatry.

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Hyperactive Children: Diagnosis and Management, *by Daniel J. Safer, M.D., and Richard P. Allen, Ph.D. Baltimore, Md., University Park Press, 1976, 233 pp., $8.50 (paper).*

The authors estimate that the prevalence of developmental hyperactivity in elementary schoolchildren is 5%; therefore, they state, it is the most common psychiatric disability in children. Although hard prevalence figures are difficult to establish because of the imprecision of diagnostic criteria, hyperactivity in children is a serious problem, and its management involves a substantial number of professionals from several disciplines. Hence this practical clinical guide should be of considerable help to students learning about and practitioners working with severely hyperactive children. Leon Eisenberg aptly states in the foreword, "I wish there had been something like it when I began my training."

Three central themes dominate the text: in the management of hyperactive children the school plays a vital role, multiple modes of intervention are generally more valuable than unidimensional efforts, and stimulant medication and behavior therapy are more effective than other treatment approaches. In 10 chapters the book describes the syndrome and its diagnosis, including a set of useful tests; discusses pharmacological and behavioral approaches to management, the latter both in the home and in the classroom; highlights the role of special education; and emphasizes the need for coordination among the various clinicians and teachers.

The authors are well qualified to address a diverse audience. The writing represents the combined efforts of a child psychiatrist and a clinical psychologist, both of whom have substantial experience in working with schoolchildren and schools. However, some disadvantages accrue from their attempt to produce a text equally useful to physicians, teachers, and many others. To keep the chapters uncomplicated and brief, much of the important information is placed into some 140 notes appended to the chapters. The notes are understandable when read separately, but the same information probably could have been incorporated into the text with greater brevity. There are also nearly 700 references—a desirable quality for a textbook, but somewhat overwhelming for one geared primarily for practitioners. I also found it troublesome that the authors use adjectives to describe individuals; for example, they refer to the children as "hyperactives."

The authors make a serious attempt to delineate developmental hyperactivity from such other entities as minimal brain dysfunction, specific learning disability, and brain damage. Primarily because of the current lack of knowledge, this goal is not fully accomplished. For example, the chapter on educational management addresses the problems of children with specific learning disabilities rather than those with developmental hyperactivity.

Readers seeking more in-depth or more theoretical information on this and related topics might find other books, e.g., those by Cantwell (1), Wender (2), and de la Cruz and associates (3), better resources; but those who wish to read primarily about the practical issues of management of children with developmental hyperactivity will find this text of excellent utility.

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GEORGE TARJAN, M.D.
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Letters, Vol. 2: 1951–1961. Bollingen Series XCV, *by C.G. Jung; selected and edited by Gerhard Adler with Aniela Jaffé; translated by R.F.C. Hull. Princeton, N.J., Princeton University Press, 1976, 638 pp., $20.00.*

From the pages of these 460 letters written by Jung between his 76th and 86th years the old scholar emerges sharp of wit, a feisty pundit, then again a wise and generous doctor to all the troubled people who wrote him. To me these letters reveal Jung's sincere human responsiveness, his endless patience at trying to explain his ideas or answer questions from anyone who would write him. He had a kind and simple way of speaking to the ordinary people who wrote him of their suicidal ideas, their homesickness, their marital problems, their dreams, their depressions, their phobias, and their demons.

He complains bitterly of his disappointment at not being understood or being misunderstood, of being misrepresented by people who had never read his works or were unable to comprehend his ambiguities and metaphorical and paradoxical statements. He resigns himself to being understood posthumously, a fate that has come true.

Those few who fought for him, who understood, who wrote favorable reviews of his books or sent him their books, offered gestures that broke through his loneliness and his sense of isolation, moving him to great appreciativeness.

There are some very long, complicated letters in this collection that bored me; although I read them all carefully I would not urge the average reader to eat all the offerings of this elegant and rich smorgasbord. Jung is trying to explain himself: he does a good job and yet how almost impossible it is to "explain" such ideas as archetypes. One of the great scholars of Western thought, Jung is just not easily understood. He abhorred popularization and stupidity. He was an intellectual who distrusted intellectuals and wrote for intellectuals. He tried to tell them of the therapeutic value of the myth, the collective unconscious, individuation, the soul, and the reality of the psyche.

Jung was convinced that mankind was at a precarious state of existence and could easily fall victim to collective man, to disastrous pollution of water and air, to radioactivity and the bomb, to overpopulation with its consequent genocide, and to noise. The din of his technology is welcome to man, he says, because it shelters him from his instinctual warnings; fear loves noise.

Many letters are answers to questions people put to him as the Wise Old Man of Küsnacht. Occasionally, however, Jung comes off as curmudgeon and, in at least one letter sent in confidence to a colleague, as indiscreet. Unfortunately, this letter was auctioned and published elsewhere before its publication here. Of course, Freud gets his share of Jung's appraisal, colored by the feelings of bitter disappointment and the lifelong pain of the broken relationship. This book has little to do with Freud, however; it has a lot to do with honesty, with man's spirit, and with what to Jung was God.

Jung clearly explains why he did not have to *believe* in God: "I know!" This statement, made during the famous BBC interview with John Freeman in 1959, impressed, surprised, and stunned many people.

Presented in chronological order, these letters show no deterioration, no loss of verve or insightfulness, an almost unquenchable curiosity, and a growing weariness in old age. Jung's commentaries on alchemy may turn off the average reader, who does not understand that Jung was interested in Eastern and medieval alchemy because it was a confirmation of the collective unconscious and revealed through its psychological, religious, and symbolic elements a bridge between Gnosticism and Christianity.

Jung does not spare us a view of his dark side, his shadow, which he willingly admits and accepts as part of his personality. He was also fully aware of his good fortune to be independent and wealthy and how this gave him a freedom denied to most others. Those who are unfavorably inclined toward Jung, those who bear secret prejudice or are looking for faults, will find them. He kept a bust of Voltaire in his waiting room at Küsnacht to remind his patients and himself that besides the amiable doctor there was an old cynic, a dubious man, a man whose ideals, morals, motives, and aspirations were all too human.

I found myself annoyed at him as he expended such energy, intellect, and affect writing letters to theologians. The time these letters were written coincides with the publication of *Answer to Job*, which brought Jung endless disappointment because it was negatively received by most theologians. Why did he expect otherwise? He held such a low estimation of most theologians, it was perhaps a case of mutual nonadmiration. I got bogged down in his long, painful, almost tormented correspondence with Father Victor White. How much he wanted to have Father White and the theologians understand his comparative psychology of religious symbolism, his idea of the God-Image, the archetype of the self.

Jung is speaking to and for the individual of treasures drawn painfully from a lifetime encounter with the unconscious. I am grateful for these human letters. It is beneath Jung that he should be deified and venerated in cultish groups or written off as an esoteric, woolly-headed mystic. He was one of the world's great psychologists, a genius who has much to say to men and women in general and psychotherapists in particular. I would strongly urge anyone who wants to know Jung to read both volumes of his letters. I would recommend them as required reading in the history of psychiatry and psychology.

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Annual Progress in Child Psychiatry and Child Development 1975, *edited by Stella Chess, M.D., and Alexander Thomas, M.D. New York, N.Y., Brunner/Mazel, 1975, 541 pp., $17.50.*

The appearance of the current volume in this series makes it possible once again to breathe more easily. The imminent decline and the potential demise of quality in the field of child psychiatry predicted in the last year's review seem to have totally reversed themselves. The group of articles selected from the 1974 literature for the current volume of *Annual Progress* reminds one of the early editions of this series in the late 1960s and early 1970s.

A new heading, Social Issues and Public Policy, groups together a series of chapters in the opening pages of the volume. In these papers Judge Bazelon asks "Whose Problem" problem children are; Urie Bronfenbrenner relates public policy to the research issues involved; and Mary Mercer assembles her well-known data into an article concerned with policy on assessment procedures. Her intriguing and clear writing style makes this the outstanding contribution under the opening rubric.

There are a host of other good articles throughout the volume as well. Adelson and Fraiberg contribute another of

their moving papers on the blind child. Barbara Tizard and Rees offer an excellent description of "The Effects of Adoption, Restoration to the Natural Mother, and Continued Institutionalization on the Cognitive Development of Four-Year-Old Children." The category of Racial Issues includes Edmund Gordon's appropriately titled "An Affluent Society's Excuses for Inequality," which provides an excellent review of the relationship between school activities and intelligence.

An equally clear and definitive statement on autism by Rutter leads off the section on the psychoses. In his classic style Rutter makes vivid the host of problems associated with the diagnosis but also offers comfortable resolutions for most of them. An item of particular interest to me is an article by Eron and associates (originally published in the *American Journal of Orthopsychiatry*) with the imposing title of "How Learning Conditions in Early Childhood—Including Mass Media—Relate to Aggression in Late Adolescence." This chapter offers even more than its title suggests. Stressing the stability of aggressive behavior over a 10-year period and the changes that recent cultural alterations have produced, the authors conclude that "low identification with both parents is the most potent predictor of aggression irrespective of the subject's sex." For those concerned about developmental problems related to aggression this short paper is a gold mine of information and leads.

There are still other excellent articles. McDermott and Char's challenge in the "Undeclared War Between Child and Family Therapy" is only one of several papers suggesting that there are and will be changes in clinical practice as well as in understanding of development. Equally intriguing is Spinette's "Understanding of Death in Latency Age Children."

As noted above, faith has been restored. The child field seems healthy; the productivity is good. The aggregate in this volume is once more well worth the cost.

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Latency, *by Charles Sarnoff, M.D. New York, N.Y., Jason Aronson, 1976, 394 pp., $20.00.*

Freud described the years from 5 to 12 as the latency, the part of a child's life when strong infantile sexual impulses are to some extent mastered and remain latent until they are reawakened in the physical and emotional flowering of adolescence. The repression of infantile sexuality and the control of primitive aggression is a gradual process, even a painful and reluctant one. There is also the child's shift from dependence on parents to peers, the development of moral reasoning, achievement and competence motivation, self-esteem, cooperation, and competition.

In *Latency* Dr. Sarnoff confronts this overly simplistic and actually naive description of latency and replaces it with a thorough, rational, and practical analysis of what any clinician who has worked with children in this age group recognizes as a highly active and tumultuous period. It is to the author's credit that he not only does an extremely thorough job in his analysis of this period, but that he does it with good humor. He notes,

> I myself had entered child psychiatry in the company of some who still believe firmly that latency children were quiet, and that the drives diminished in latency to almost nonexistence. What they believed, they saw, and I, wishing to find a place among them, was ready to agree and to see as they saw. My attempts to carry through this intention were short lived. The very first latency age youngster to whom I was assigned as a therapist tore the theory to shreds and cast it to the winds.

Sarnoff bases his research on extensive case histories and what is obviously a busy private practice in the treatment of children in this age group. He evolves what he defines as the structure of latency as an attempt to dissipate stress through fantasy. When the child is successful in discharging such stress he is in a state of latency. For Sarnoff, it is the potential for achieving this state that defines the years from 6 to 12. He believes that the state of latency is the result of an uneasy equilibrium between social and maturational demands effected through the establishment and organization of ego mechanisms specific for this period. He identifies these mechanisms in terms of cognitive development, sexuality, superego development, and various mechanisms of defense.

This work is an interesting mix of psychoanalytic theory and practical everyday advice for the child psychotherapist or child analyst in his or her treatment of the latency age child. Sarnoff expands his thesis into some fascinating theoretical considerations involving the ontogenesis of system consciousness, the origins of latency in prehistory, and, finally, pathological conditions in latency.

There is no doubt in my mind but that this book represents the most definitive statement on latency in psychoanalytic theory today. Certainly it can be said that it has laid to rest forever the theory that latency is a quiet period of very little clinical or developmental significance. *Latency* is highly recommended for those theoreticians and clinicians who wish to explore an imaginative if not encyclopedic analysis of the period of childhood we identify as latency.

JOHN C. DUFFY, M.D.
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Advances in Sleep Research, Vol. 2, *edited by Elliot D. Weitzman, M.D. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 231 pp., no price listed.*

This second volume in the *Advances in Sleep Research* series again underlines the breadth of the studies undertaken by sleep researchers in their multifaceted attempt to explicate our knowledge of sleep. Although this volume is less successful than the first volume, Dr. Weitzman has selected important topics by researchers deeply immersed in their area of sleep research who present effective and informative reviews.

Gardner and Grossman present an excellent essay on "Normal Motor Patterns in Sleep in Man." Following a clarifying review of methodological problems in the study of body movements during sleep, they explore the correlates and origins of large and small movements, which have been presumed to be related to rest and to dreams, respectively. They provide a particularly valuable description of the common center theory (often incorrectly called the scanning hypothesis), with additional evidence in support of a correlative relationship between limb movement and dream activity. The considerable importance of this area of work is twofold: first, as a potential basis for a theory of sleep function; and second, in the understanding of mind-body relation-

ships that it provides using dreaming sleep as a paradigm.

Sleep apnea with excessive daytime sleepiness is one of the sleep pathologies that has recently received increasing clinical attention. Orem and Dement, in their chapter on "Neurophysiological Substrates of the Changes in Respiration During Sleep," contribute to our understanding of the neurophysiological mechanisms that produce apnea during sleep. They infer from their research on single-cell recordings of respiratory neurons in cats that there are three mechanisms that produce apnea during sleep: "The first, which occurs mainly in wakefulness and non-REM sleep, is the result of continuous firing by ventrolateral medullary expiratory neurons. The second and third, appearing almost exclusively in REM sleep, are a defect in respiratory rhythmicity and a complete failure of respiratory drive."

Three other reviews are of high interest as well. The chapter by Anders on "Maturation of Sleep Patterns of the Newborn Infant," besides providing interesting data on the developmental aspect of various physiological measurements during sleep, calls attention to the importance of state-trait differences in studying sleep and to the view of development as not being a straight line but involving a series of transformations. The article by Tanaka and associates, "A Sleep Study of Acute Psychotic States Due to Alcohol and Meprobamate Addiction," resolves a discrepancy in the literature as to whether alcoholic delirium is the overflow of REM into waking. Tanaka and associates point out that much of the sleep of patients with delirium resulting from alcohol or meprobamate is made up not of classical REM but of a low-voltage, mixed-frequency EEG, REM bursts, and a tonic mental EMG. Okuma, Fukuma, and Kobayashi report on their use of a home "dream detector" that obtains dream content relatively free of laboratory influences. Their data support the view that laboratory-collected dreams may not be an appropriate sample of dreams from which to generalize.

This second volume in the series clearly contains work of great interest (chapters 1, 2, 3, 9, and 10). Unfortunately, the remainder of the articles (chapters 4, 5, 6, 7, 8, and 11) report on work of less general value or interest. These latter chapters are bound too closely to experimental data and lack the more definitive review and summary that make the essay by Gardner and Grossman so valuable.

Advances in Sleep Research, Vol. 2, is, like its predecessor, a valuable and useful summary for the researcher in sleep and the clinician who wants to keep abreast of the work in sleep.

I would express the hope that the editor of this valuable series be more selective in his choices for inclusion, provide an introduction to each volume that places the series and volume in some perspective, and, lastly, consider focusing each volume around some topic or issue in sleep research.

MILTON KRAMER, M.D.
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No Single Thread: Psychological Health in Family Systems, *by Jerry M. Lewis, M.D., W. Robert Beavers, M.D., John T. Gossett, Ph.D., and Virginia Austin Phillips. New York, N.Y., Brunner/Mazel, 1976, 260 pp., $13.95.*

This is an important book for the few who have pronounced the death of the family and for the many who are fully aware of the weaknesses of the family system but see no better alternative. The literature overflows with descriptions of families that are seductive, schizophrenogenic, skewed, schizmatic, and generally shaky and sick. Lewis and his associates proclaim that there are at least a few families that are alive and well and living in middle America.

No Single Thread describes the conception, performance, and conclusions of a research study involving 44 families, 12 of which were studied intensively. All of the families were intact, the oldest child in each family was in mid-adolescence, and no family had a member in self-acknowledged psychiatric or legal difficulty. Lewis and associates acknowledge that their sample was narrow in that it was drawn from a Texas community of white, middle-class, churchgoing people. Nevertheless, their observations and conclusions appear to provide important clues about successful and healthy family functioning.

The primary goal of the project was to measure interactional data. The research framework was systems oriented rather than a study of family profiles made up of individually based, content-oriented data. The authors believe that family strengths are better understood through the study of the total family system than through the study of the family members individually, although specific problems were more readily apparent from interviews with the individuals.

In the pilot study, which investigated 23 families (12 of these contained a recently admitted adolescent inpatient and 11 were controls), a number of basic research questions were explored. These included the selection of appropriate family interactional tests, videotaping of family sessions, and the selection of both long and short excerpts from the tapes for rating. The authors also solved problems posed by the use of raters who varied widely in their levels of training and experience.

Chapter 3, titled "A Theoretical Basis for Family Evaluation," describes five family qualities considered most important in the development of optimally functioning individuals. These include the power structure, the degree of family individuation, acceptance of separation and loss, perception of reality, and affect. Each of these qualities is described as it applies to the severely disturbed family, the mid-range family (in which there is neurosis or behavior disorder), and the healthy family. I found this to be a most useful theoretical approach to the question of incompetence or competence of the family system as a vehicle for the growth and development of individuals.

The next 5 chapters describe various aspects of the research study and include comprehensive pictures of the 12 most intensively studied families in fascinating detail. Descriptions of the research instruments used are also provided in these chapters.

The final 2 chapters, which include an overview of the study and the implications of the findings for the clinician, contain a wealth of important observations. These generally stress that the optimally functioning families apparently derived their strength from the presence and interrelationship of many variables, there being no single formula for family health. Caring, basic trust, respect for varying perceptions of the world, willingness to explore different avenues to the solution of problems, a high degree of personal autonomy, openness to expression of feeling, and an ability to see themselves as others see them are among the most significant of these variables.

The importance of this book is that it should stimulate the reader to consider the possibility of teaching families some of the qualities that may lead to the successful growth, development, and "death" of the total family unit after it has served its primary purpose. It is probably too late to teach

much of this material to severely disturbed or mid-range families, but it would be revolutionary if we were able to introduce courses for living into the schools that would counterbalance the stress on acquisition of affluence as the primary goal of education by teaching about issues that might lead to lives with emotional strength and quality. For mental health professionals, teachers, and others, this book is worth studying.

N. MICHAEL MURPHY, M.D.
Albany, N.Y.

Brain, Behaviour and Drugs: Introduction to the Neurochemistry of Behaviour, *by David M. Warburton. New York, N.Y., John Wiley & Sons, 1975, 252 pp., $18.50.*

This volume provides a short introduction to several areas of neurochemistry and neuropharmacology that are relevant to important behavioral phenomena. The book is written in the easy style of British textbooks and can be read through without much difficulty. This quality results in part from the fact that a great deal of effort has gone into integrating the material in each chapter. The author does not make excessive use of subtitles and, although the book is adequately referenced, the references are limited to those which are essential. This makes the volume somewhat less useful as a reference book but enhances its value as a textbook.

The book consists of sections on the chemical nature of synaptic transmission, on homeostasis, mood, attention, motor control, sleep and dreams, and on biochemical aspects of the important psychiatric syndromes. A chapter on biochemical aspects of intelligence is interesting and useful in that biochemical material is not usually integrated under that rubric. There is also a very topical chapter on drug dependence.

One minor shortcoming of this book is that the use of such phrases as "biochemical basis of mood" might convey to students the impression that mood can be entirely explained in terms of biochemistry. The author reinforces this idea in his preface, in which he says there is a "trend in psychopharmacology in which attempts are being made to understand behaviour in terms of the basic neurochemical systems in the brain." A more contemporary view would hold that behavior can be influenced or modulated and even modified by biochemical manipulations but is not fully explainable in terms of any biological system. Perhaps the terminology is unintentional and the author is using "basis" to mean "aspect," in which case the ambiguity is unfortunate.

On balance, the volume is excellent. It is lucid, informative, and written in an eminently readable literary style. It should serve as a very useful book for students of psychiatry, physiological psychology, introductory neurobiology, and introductory neuropharmacology.

ARNOLD J. FRIEDHOFF, M.D.
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The Growing Edge of Gestalt Therapy, *edited by Edward W.L. Smith, Ph.D. New York, N.Y., Brunner/Mazel, 1976, 234 pp., $12.95.*

A smorgasbord can be an exciting adventure in eating, but the hope inspired often exceeds the satisfaction obtained. Something is lost in the coherence of the experience because the very variety that excites the eye sometimes confuses the palate. Smorgasbord anthologies on psychotherapy have become a popular book form. They provide many exciting and interesting moments but usually leave the reader less than entirely satisfied. *The Growing Edge of Gestalt Therapy* is in this genre and, as such, is like several books on Gestalt therapy published in the past couple of years. This one is better than most because it provides somewhat more order and cohesiveness. Nevertheless, it, too, suffers from the inherent unevenness of an anthology, with some memorable chapters and some that are not so memorable.

There are six parts to this book. The first is on the historical background of the therapy and has only a single chapter. The second, Further Explications of Gestalt Therapy, is a collection of 5 articles that have little in common with one another, viewing Gestalt therapy from different perspectives. The third, Gestalt Therapy and Jungian Psychology, contains 2 chapters. The fourth, titled Gestalt Therapy Integrated with Other Techniques and Systems, contains 4 offerings on such varied topics as hypnosis, existential therapy, a group-dynamic approach, and the use of a communication perspective. The fifth part of the book is composed of 3 chapters on Gestalt therapy and Eastern philosophy. The sixth and final part, A Summing Up, is a single short paper by Laura Perls, the widow of Fritz Perls and cofounder of the Gestalt method.

The book contains much interesting and useful information; the familiar themes of Gestalt therapy serve to bring the information together: i.e., the emphasis on the here and now, the recognition of polar opposites and the process of resolving them, integration and person-centeredness, and an emphasis on awareness, growth, and self-actualization. These and related concepts provide an increasingly recognized and accepted definition of mental health and the qualities of a fully functioning person. They are beginning to replace some of the vagaries of the "genital character" and maturity. Perhaps more important is that Gestalt therapy offers treatment approaches directed specifically toward the achievement of these qualities. As such, there is a concrete relationship between the goal of health and the methods employed. Not everyone will accept these definitions of health, but if one does the techniques are available.

The first chapter, by Edward W.L. Smith, is titled "The Roots of Gestalt Therapy" and provides the most extensive and detailed explication of the theoretical basis of Gestalt therapy yet available. It contains sections on what Gestalt therapy has derived from psychoanalysis, Reichian theory, character analysis, existentialism, Gestalt psychology, and Eastern religions. Each section is scholarly, well documented, and detailed.

A brief 4-page chapter by Robert A. Hall titled "A Schema of the Gestalt Concept of the Organismic Flow and Its Disturbance" is a succinct and valuable contribution illustrating phasic homeostasis according to the Gestalt conception. Despite its brevity, this chapter has important practical implications. An excellent diagram compares healthy and pathological perspectives.

Another especially valuable chapter, by George B. Greaves, is titled "Gestalt Therapy, Tantric Buddhism and the Way of Zen." It is both scholarly and practical, comparing Gestalt therapy and these Eastern religious approaches. Described first are the methods common to each, such as focusing and role playing. Greaves then introduces the use of the koan, the statement or question that seems to defy all laws of logic and requires fresh solution; zazen, the process of intense concentration emptying one's mind; and

mondo, the conversations between a master and student (not unlike more conventional dialogues between therapist and patient). He also discusses the use of meditation techniques to enhance psychotherapy, employing the three primary aids in the Tantric method: mantras, or sounds; mandalas, or visual designs; and mudras, or symbolic hand and finger gestures. This chapter is one of the few using the method of presentation that has become the hallmark of writing on Gestalt therapy, the recorded dialogue between patient and therapist.

Laura Perls's paper, "Comments on the New Direction," is a refreshing departure from the heavily conceptual and annotated chapters that precede it. Once again she expresses what she sees as important in Gestalt therapy: the actual experience, the awareness continuum, the relationships of time, and contact and support. She emphasizes the flexibility and personal style of the therapist to achieve these ends and evidences her commitment to the artistic elements in psychotherapy.

This book is different from its predecessors in Gestalt therapy in that it emphasizes theories and concepts rather than practice and there are very few of the usual dialogues for the reader to follow. Despite this emphasis on the conceptual, the book remains true to the effort of Gestalt therapists to achieve integration; each chapter attempts to integrate Gestalt therapy with other methods to which contributors have a commitment. In that sense, each chapter serves as a model for each therapist to find ways of putting together unique influences in his or her life beyond any single ideology.

I cannot help but feel a little wistful about the progress which this volume undeniably makes in the literature on Gestalt therapy. Although it achieves new and more sophisticated theoretical perspectives, this very sophistication detracts from the "beyond mere words" power of the method. The addition of this heavy layer of theory tends to detract from the essential experiential and concrete quality of the therapy that has caused it to grow so rapidly and to stand out among other forms.

ARNOLD R. BEISSER, M.D.
Los Angeles, Calif.

Contemporary Marriage: Structure, Dynamics, and Therapy, *edited by Henry Grunebaum, M.D., and Jacob Christ, M.D. Boston, Mass., Little, Brown and Co., 1976, 485 pp., $17.50; $12.50 (paper).*

Considering the plethora of books on marriage, Drs. Grunebaum and Christ have produced a most valuable book. It is rare to find 25 authors who vary in competence and lucidity from excellent to outstanding to scholarly. This book will become *must* reading not only for psychiatrists but for all members of the mental health professions. It is well organized and easy to read, the price is right, and the editing is superb (I found only one mistake: on page 370, reference 7 should be Lederer instead of Leder).

The contributing authors represent a spectrum of professionals: an anthropologist, a historian, a social worker, two family therapists, two lawyers, two sociologists, nine physicians, and nine psychologists. As the editors, both of whom are psychiatrists, succinctly state in their preface, "Our experiences as clinicians and teachers have convinced us that what the therapist most requires . . . is an understanding of the basic forces that impinge on and determine the course and quality of married life."

The book is divided into three sections, described by the editors as follows:

> The first discusses the social forces that impinge on marriage; the second describes the course and psychology of the marital relationship [applicable to all relationships]; and the third deals with the diagnosis [including valuable comments on prevention] and treatment of couples with marital difficulties.

In the last section a range of therapeutic approaches is offered in a sequence of excellent chapters.

In the opening chapter the editors present the myths and realities confronting marriage. They point out the importance of content vis-à-vis relationship. Their opening sentences answer the question repeatedly asked about the future of the marital institution:

> Changes in social values and obvious vicissitudes in marriage notwithstanding, the institution of marriage is still very much with us. This is true despite the fact that in many modern societies, and increasingly in our own, the satisfaction of sexual needs often takes place without the sanction of a marriage ceremony. . . . It is not the act of marrying that is changing, but rather the reasons individuals have for marrying and how they define a good marriage.

Thus in the following 2 chapters Demos (a historian) and Abernethy (an anthropologist) cogently and superbly present an important trend in marriage—the increasing importance of emotions and the decreasing value of economic forces. In another chapter the Rapoports deal with the changing transactions between work and marriage in their usual scholarly manner. This chapter should be read and reread by all therapists. The Rapoports accomplish their aim in this paper: to provide "a perspective on some salient patterns now emerging and to discuss their implications, particularly for those in the mental health professions."

Because of space limitations I cannot do full justice to the valuable materials presented in the second and third sections of this book. To do an adequate review would result in a small monograph. The book holds one's attention and contains a wealth of information. This contribution to the literature will be an often-consulted addition to the psychiatrist's library.

BERNARD L. GREENE, M.D.
Palm Springs, Calif.

Psychiatric Illness: Diagnosis, Management and Treatment for General Practitioners and Students, 2nd ed., *by H. Merskey, M.A., D.M., and W. Lawton Tonge, M.D. London, England, Baillière Tindall (Baltimore, Md., Williams & Wilkins Co., exclusive U.S. agents), 1974, 284 pp., $11.50 (paper).*

The intent of the authors of this interesting psychiatric text is generally fulfilled. Particularly well met is their effort to convey to the nonpsychiatric physician basic skills concerning the treatment of psychosexual problems in marriage and the emotional overlay that frequently compounds physical illness. Their candor in reassuring enlightened primary care physicians that they can, in fact, handle many of their patients' emotional needs is also well suited to the patients' needs.

Although I am not familiar with the first edition of this book, it was apparently well received. In reviewing this edition I found that, although well presented, the material does not seem to be well footnoted or to reflect a good cross section of *current* psychiatric thinking. In other words, the volume has apparently not been fully updated, as is at least implied in its opening chapters. In particular, it would appear that some types of emotional illnesses seen in general practice are dealt with in depth, whereas other psychiatric or psychophysiological disorders are only lightly touched on. Thus there is some lack of balance in parts of the book. For example, the issues of the dying patient and suicide are not treated fairly enough, in my opinion, to leave the average generalist with a feeling of comfort in handling patients in these situations. The generalist would most likely read Merskey and Tonge's work and then call for an emergency psychiatric consultation.

With the above exceptions, I feel that this book does meet many of the needs of the nonpsychiatric physician; I would recommend it to him or her as part of the medical armamentarium, especially in efforts to treat patients in their physical and emotional entirety. Readers on both sides of the Atlantic will find this text well worth their investment of time and money.

DONALD E. FISCHER, M.D.
Omaha, Neb.

The Therapist's Handbook: Treatment Methods of Mental Disorders, *edited by Benjamin B. Wolman, Ph.D. New York, N.Y., Van Nostrand Reinhold Co. (Litton Educational Publishing), 1976, 519 pp., $22.50.*

In providing information about psychiatric treatment to a variety of professionals, this collection covers a wide range of topics quite thoroughly in a practical way that everyone will find useful. None of the 28 authors, except the editor, contributes more than one chapter. In the first section various types of therapy are described; in the second, mental disorders are taken up one by one along with their specific treatments.

This organization, although it guarantees a methodical crisscrossing of the subject, leads to considerable unevenness, inconsistency, and, as the editor admits, "some degree of overlapping and repetition." For example, in the first section of the book Abrams creditably describes mechanisms, dosages, and side effects in psychopharmacology and convulsive therapy; in the second section some of the same points are covered again—some better, some worse—in chapters on geriatrics, depression, and schizophrenia. The inconsistency is manifested not so much in conflicts between theoretical approaches as in conflicts between the presence of several rather inflated chapters in the first section (e.g., psychoanalytic technique, hospital care, and aftercare) and the relative absence of discussion of these methods when one comes to particular disorders in the second section.

More distressing is the unevenness of depth, breadth, and quality. One author discusses a number of medications with exact milligram doses but refers the reader elsewhere for details of psychotherapy; Chessick's chapter on neuroses describes minutiae of psychotherapy but nothing about behavior therapy; Chafetz gives over 7 pages to deal with the treatment of alcoholism, but the subject of psychosomatic disorders is given 63 pages. Are psychosomatic disorders really 9 times more prevalent than alcoholism?

However, Dr. Wolman has intelligently presented a variety of approaches in a way that reflects the present state of psychiatry in transition. To try to cover everything in one book and present it for every kind of professional reader requires judicious vision. In a foreword, Bertram Brown makes the startling statement that there are more than 130 kinds of psychosocial therapy. Dr. Wolman has collected a good representation of this plenitude.

Another feature of our times evident in this book is modesty—of goals, claims for success, and advocacy of techniques—with a kindly regard for those who represent other schools and techniques. These attempts to reach out toward other disciplines may betoken the long-awaited integration of our specialty.

One final indispensable aspect for a handbook that professes to be helpful is currency. Up-to-date recognition of new boundaries appears throughout this volume, notably in chapters on drug addiction, psychosomatic disease, and modified psychoanalytic techniques. Especially first-rate in every way, particularly for their appreciation of the past and for their description of innovative methods that appear to be balanced with sound judgment, are the chapters by Lazarus on behavior therapy, Rosenbaum on group therapy, and Chessick on psychotherapy. At least for a few years, or until the next psychiatric revolution, the practitioner mainly interested in developing specificity in therapy will want this book.

C.E. SCHORER, M.D.
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Assessment of Organic Intellectual Impairment, *by John McFie. New York, N.Y., Academic Press (Harcourt Brace Jovanovich), 1975, 161 pp., $12.00.*

This slim volume addresses the topic of neuropsychiatry. Clinical psychology has traditionally been aligned with psychiatry and considerably influenced by holistic views of brain function, exemplified by Lashley's concept of mass action (1). Neuropsychology evolved as growing evidence indicated that strong structure-function coupling existed in the cerebral hemispheres. Neuropsychology thus has as one of its objectives the development of behavioral tests for the recognition of localized cerebral lesions.

The author of this book bases his exposition on the use of the Wechsler Adult Intelligence Scale alone. This has the advantage of using a test familiar to psychologists but the disadvantages that the subtests that make up the scale were not designed to tap specific neural functions and the concept of intelligence itself is too much dominated by holistic concepts.

The volume opens with an overly brief chapter on "Neuropsychological Correlations" followed by chapters on "Testing" and "Diagnostic Interpretation." A subsequent chapter contains illustrative case studies. A separate chapter addresses itself to organic impairment in children.

Old concepts die hard, particularly if they have attained the dignity of such a name as "intellect." Thus McFie rightly rejects the concept of a single test for "brain damage" in his concluding chapter (p. 145). However, earlier, in discussing testing, he indicates that the examiner "will have been able to estimate to what extent the patient's disabilities are at the intellectual level or are at the *lower level* of disorders of language" (p. 16; my italics). What function of functions does McFie subsume under the term "intellectual," and how is this level "higher" than language? Inconsistencies such as

this, overly simplified views of cognitive and linguistic functions, and narrowly restrictive concentration on a single psychometric test constitute, in my view, the major weaknesses of this book. For neurologists and psychiatrists who wish to learn more about neuropsychological testing it is too parochial and suffers in comparison with existing monographs on this subject.

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DAVID D. DALY, M.D., PH.D.
Dallas, Tex.

Progress in Behaviour Therapy, *edited by J.C. Brengelmann, J.T. Quinn, P.J. Graham, J.J.M. Harbison, and H. McAllister. New York, N.Y., Springer-Verlag, 1975, 307 pp., $31.00.*

This volume contains 36 papers that were read at a conference on behavior engineering and therapy held in Wexford, Ireland, and attended by 320 delegates from Europe and North America. These highly technical papers indicate that behavioral therapy has developed from the early learning principles to a more complex discipline based on detailed studies of both animal and human behavior. There is an increasing integration of therapies derived from experimental procedures with clinical skills and even with traditional psychotherapy. In some cases treatment of symptoms and behavior modification are combined with insight therapy.

Among the many subjects discussed are operant conditioning, behavior modification, response prevention modeling, flooding, assertiveness training, implosive therapy, aversion therapy, desensitization, self-control training, feedback techniques, and mathematical evaluation criteria. Among the disorders treated were head-banging, self-mutilation, language acquisition, agoraphobia (with the concomitant use of a beta-blocking agent), bereavement, sexual dysfunction, frigidity, speech anxiety, smoking, obesity, phobias, and even schizophrenia.

The impression gained from reading this book is that traditional analytically oriented insight psychotherapy and behavior modification therapy have much in common and much to contribute to each other. The effectiveness of psychotherapy is enhanced by the open-mindedness of the various disciplines to each other and a melding of all into a pragmatic global approach to behavior disorders. I was especially impressed by the honesty of these behaviorists in reporting failures as well as successes and their ability to improve their techniques on the basis of unbiased long-term follow-up evaluations of treatment results.

FREDERICK LEMERE, M.D.
Seattle, Wash.

Drugs in Combination with Other Therapies, *edited by Milton Greenblatt, M.D. New York, N.Y., Grune & Stratton (Harcourt Brace Jovanovich), 1975, 188 pp., $14.00.*

In the preface of this small volume the editor indicates that "we have come to the point of asking how drugs alone compare with drugs in combination with other therapies . . . family therapy, social therapy, work therapies, and many other types of rehabilitative activity." The assignment is obviously too large to be accomplished in one small book.

There are 11 chapters of considerably variable quality. Several chapters seem not to consider the use of psychotropic drugs at all (i.e., "Drugs and Other Therapies for the Rehabilitation of the Chronic Addict"; "Drugs in Combination with Other Therapies for Alcoholics"; and "Combination of Drugs with Behavior Therapy"). The chapter on behavior therapy mentions drugs only in passing but berates psychiatrists for neglecting this treatment modality, which the authors do little to clarify.

The chapters on "Drugs and Sociotherapy in the Aftercare of Schizophrenia" by Hogarty, Goldberg, and Schooler; on "Drugs and Rehabilitation in Schizophrenia" by Chien; on "Long-Acting Phenothiazine and Social Therapy in the Community Treatment of Acute Schizophrenia" by Goldstein, Rodnick, Evans, and May; and on "Psychotherapy and Drugs in Schizophrenia" by Grinspoon and Shader address themselves to the issue of drugs in combination with other therapies by reporting work in progress and considering the many problems faced in complex studies. For the most part, the studies reported would not guide the seasoned clinician in his or her everyday work, but they would help induce a proper sense of humility in his or her approach to the tougher patients. The chapter on "Psychotropic Drug Combinations: Good and Bad" by Ayd is instructive and enlightening, but the other therapies in this chapter are just other drugs.

An important and perhaps the most useful feature of this book is the inclusion of a fairly extensive bibliography after each chapter.

I believe that some usefulness can be extracted from some parts of this volume, but the time spent reading it would be more rewarding if spent reading other sources of similar information, often from the same authors.

DOUGLAS GOLDMAN, M.D.
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The Varieties of Abnormality: A Phenomenological Analysis, *by Raymond J. McCall, Ph.D. Springfield, Ill., Charles C Thomas, 1975, 560 pp., $22.50; $16.69 (paper).*

Stating flatly that we have no knowledge of etiology on which to base a rational therapy and only a nominal agreement on classificatory criteria, McCall rejects any discussion of etiology or treatment methods as mere speculation and elects to apply an approach that he calls "phenomenologically oriented clinical description." It is not a classical experiential phenomenology but, rather, a descriptive behavioral phenomenology based on the author's observations or the reported behavioral observations of others (one is never sure which furnishes McCall's basic data). His method, then, might properly be called rational and authoritative rather than phenomenological.

The result is a curiously nostalgic book that reads like the classical texts of the prepsychoanalytic, pre-experimental psychopathology days of psychiatry. It is replete with long and detailed case histories, but one misses any reference to the modern contributions of genetics, psychopharmacology, or behavior modification.

McCall's opening chapter defines normality as the psychological conditions favorable to the individual's attaining the good life. Abnormality is the opposite. His next chapter deals with the classic defense mechanisms; he sees these as

ineffective and helping to "set the stage for neurotic and other maladaptive symptoms." McCall denies that neurosis is an autonomous disorder and claims that the various neurotic behaviors are symptom complexes found as part and parcel of schizophrenia, depression, character disorder, situational stress reactions, and every other kind of personality aberration but not existing independently as disorders in their own right.

There follows a discussion of the "functional" psychoses, those not known to possess an organic etiology. The treatment here is strictly classical and includes the simple, hebephrenic, catatonic, and paranoid subtypes of schizophrenia. McCall then includes a chapter on personality disorders, which he considers of pathological significance but widely neglected in the literature. These are classed as inadequate, schizoid, paranoid, cyclothymic, compulsive, and hysteroid. In a way reminiscent of Kretschmer these disorders are related to the more serious psychotic behaviors.

The section on character disorders that follows is the longest in the book (some 200 pages) and includes sociopathy, alcoholism, drug abuse, and sexual deviation (homosexuality is viewed as grim, not gay). The lack of etiological data and classificatory agreement in these areas lends encouragement to McCall's descriptive approach. There is in his treatment a sometimes overt, sometimes latent, moralizing that, although refreshing, runs counter to humanitarian attitudes typical in the field.

The book closes with a discussion of "Disorders of Presumably Known Etiology," which covers the organic disorders (including a 5-page treatment of "neurodermatitis also called atopic dermatitis"). Here the author exhibits his fascination with medical terminology and symptomatology, a tendency present throughout the volume that contributes to its nostalgic aura. There is a glossary, an index, and a bibliography, over 90% of which is pre-1970.

McCall writes well, if somewhat petulantly at times, and there are many interesting ideas embedded in the book. It should make pleasant reading for students, but I doubt its acceptance by many of their professors.

WILLIAM A. HUNT, PH.D.
Chicago, Ill.

The Biofeedback Syllabus: A Handbook for the Psychophysiologic Study of Biofeedback, *edited by Barbara E. Brown, Ph.D. Springfield, Ill., Charles C Thomas, 1975, 495 pp., $26.50; $19.75 (paper).*

The Biofeedback Syllabus: A Handbook for the Psychophysiologic Study of Biofeedback is misnamed. A more appropriate title for this annotated bibliography would be *Psychophysiology Syllabus: A Limited Bibliography*. The work contains more than 1,400 references to articles pertaining to the psychophysiology of electrodermal activity, blood pressure, heart rate, muscle activity, and EEG, plus a smattering of references to studies of other body systems. Each reference is followed by an abstract summarizing the basic points of the paper. The syllabus is organized by sections on body systems under which appear various subheadings. References are usually included on measurement, instrumentation, control mechanisms, correlates of behavioral and cognitive states, and psychopathology; lists of review articles are given under a separate heading.

Poor organization is this book's most limiting factor. Headings are not followed consistently from system to system. A separate heading for clinical studies within each section would have been useful but is not included. Each section is followed by an index of descriptor terms with a key to articles containing relevant information. However, the lack of any master index for the entire book makes it difficult for the student to identify response systems relevant to a particular issue. Articles published before 1965 are listed in an appendix to each section; papers that should be given much more prominence in a basic reference source are thus hard to find. Articles on operant control of autonomic responses are listed separately from those on biofeedback. These inconsistencies in organization are confusing to both novice and expert readers.

Examining the contents of this book one wonders why the work was called *The Biofeedback Syllabus*. The editor states her reason: "Because of the limitations and control inadequacies of the scientific method as applied to organisms capable of discriminating the significance of elements in their environment, *there can be no sharp dividing line between biofeedback and other learning processes*." This is a strong statement and one that needs considerable support if it is to be used as the framework of a reference book. For instance, why are studies of classical conditioning included here? Classical conditioning is not biofeedback, no matter who the experimental subject is, because the stimulus is not contingent on the response. Nor is the relationship of electrodermal activity or heart rate to psychopathology necessarily relevant to biofeedback. The impression given in this book is that biofeedback *is* psychophysiology. This idiosyncratic definition of the field makes this collection of references neither a bibliography of biofeedback nor one of psychophysiology. To be truly useful, a bibliography must be totally exhaustive or narrowly circumscribed. This one is neither and is therefore of limited value.

RICHARD S. SURWIT, PH.D.
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Adolescent Psychiatry, Vol. IV: Developmental and Clinical Studies, *edited by Sherman C. Feinstein and Peter L. Giovacchini. New York, N.Y., Jason Aronson, 1975, 410 pp., $20.00.*

Many years ago, when the Menninger Foundation was still the Menninger Clinic and I was still a psychiatric aide there, a young Topeka psychiatrist named Bernard Hall was talking with me about adolescents and adolescence (a time of life I was then experiencing myself). He said that psychoanalytic theory was developing significantly its efforts to comprehend adult behavior and early childhood personality. But, he added with exasperation, when it came to the age of adolescence, "all hell breaks loose," for both the person and the theory.

This fourth volume of *Adolescent Psychiatry* is an important contribution toward clarifying some of the huge hunks, bits, and pieces of that dual explosion. A distinguished group of contributors, well chosen by Feinstein and Giovacchini, direct their efforts toward behavior, personality process, and developmental issues as well as toward psychopathological development. There is also a series of chapters on broader cultural issues and political and theoretical considerations. Focusing on two parallel concerns, "one dealing with the tragedies within our culture and the other with individual misery," this volume represents a significant potpourri of articles whose diversity of topics and focuses on adolescence

is comprehensive, stimulating, and infrequently flawed by disruptive variations in quality of writing and style.

With very few exceptions, each chapter has a brief summary conclusion and supporting references. The overall collection has a single index. To blend the various sections together the editors have woven in transitional comments.

I sensed an unwritten, cautious, perhaps unintended attitude of optimism in the book as a whole, an optimism that perhaps we are about to begin to understand some of the important interactions of adolescent behavior, parental attitudes, and cultural style as they influence each other. Fritz Redl echoes, decades later, Bernard Hall's exasperated, accurate accounting of the psycho-physiological-spiritual state known as adolescence: "We can only reassure ourselves by being realistic and acknowledging that in our equations there are more unknowns than knowns." Redl's brief snapshot of the adolescent's emigration and immigration reminds us of Bernfeld's earlier (1938) observation on three common developmental styles of adolescence, which, when placed in focus with contemporary knowledge of sociocultural styles of parenting, blossom into an understanding of frequently observed family dissonances that enter our 1976 consultation rooms regularly. As such, some significant pieces of the "hell broken loose" begin to fit and make sense, a sense that is practical in that it can be translated into treatment designs for bringing family understanding to the bewildered parents and teenagers staring at each other across the ever-present generation chasm so exaggerated by our culture's precariously hyperkinetic pace.

In summary, I recommend this volume of *Adolescent Psychiatry* to all readers interested in adolescent behavior as an important collection of theoretically thoughtful, useful, and provocative articles on contemporary adolescence in Western culture.

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Books Received

This listing acknowledges the receipt of recent books. Books of particular interest to the readers of this journal will be reviewed as space permits, and copies of the reviews will be sent to the publishers. Books cannot be returned to the publishers.

The Child Care Worker: Concepts, Tasks and Relationships, *by Jack Adler, Ed.D., A.C.S.W. New York, N.Y., Brunner/Mazel, 1976, 189 pp., $10.00.*

Hospitals, Paternalism, and the Role of the Nurse, *by Jo Ann Ashley. New York, N.Y., Teachers College Press, 1976, 153 pp., $9.95.*

Human Ecology and Cognitive Style: Comparative Studies in Cultural and Psychological Adaptation, *by John W. Berry. New York, N.Y., Sage Publications (Halsted Press, John Wiley & Sons, distributor), 1976, 242 pp., no price listed.*

Sexual Adventures in Marriage, *by Rüdiger Boschmann and Günther Hunold. New York, N.Y., Pent-R Books, 1976, 159 pp., $12.95.*

Psychoanalytic Technique and Psychic Conflict, *by Charles Brenner, M.D. New York, N.Y., International Universities Press, 1976, 214 pp., no price listed.*

Rating Scales, *by Enzo Codignola and Giovanna Mantovani. Milan, Italy, Essex (Italia), 1975, 208 pp., no price listed.*

Anxiety and Depression: The Adaptive Emotions, *by Charles G. Costello. Montreal, Que., Canada, McGill-Queen's University Press, 1976, 144 pp., $10.00.*

Human Diversity: Its Causes and Social Significance, *edited by Bernard D. Davis and Patricia Flaherty. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 241 pp., no price listed.*

The History of Psychotherapy: From Healing Magic to Encounter, *edited by Jan Ehrenwald, M.D. New York, N.Y., Jason Aronson, 1976, 583 pp., $25.00.*

The New Volunteerism: A Community Connection, *by Barbara Feinstein and Catherine Cavanaugh. Cambridge, Mass., Schenkman Publishing Co., 1976, 178 pp., $11.25.*

Theoretical and Experimental Bases of the Behaviour Therapies, *edited by M. Philip Feldman and Anne Broadhurst. New York, N.Y., John Wiley & Sons, 1976, 434 pp., $26.00.*

The New Games Book, *edited by Andrew Fluegelman, New Games Foundation. San Francisco, Calif., Headland Press (Garden City, N.Y., Dolphin Books, Doubleday & Co., distributor), 1976, 191 pp., $4.95 (paper).*

Child Behavior Analysis and Therapy, *by Donna M. Gelfand and Donald P. Hartmann. New York, N.Y., Pergamon Press, 1975, 321 pp., no price listed (paper).*

Cannabis and Health, *edited by J.D.P. Graham. London, England, Academic Press (Harcourt Brace Jovanovich), 1976, 447 pp., £14.50.*

Biomedical Ethics and the Law, *edited by James M. Humber and Robert F. Almeder. New York, N.Y., Plenum Press, 1976, 538 pp., $19.50.*

Piaget and His School: A Reader in Developmental Psychology, *edited by Bärbel Inhelder and Harold H. Chipman; Charles Zwingmann, coordinating editor. New York, N.Y., Springer-Verlag, 1976, 288 pp., $14.80 (paper).*

Maturation of the Therapeutic Community: An Organic Approach to Health and Mental Health, *by Maxwell Jones, M.D. New York, N.Y., Human Sciences Press (Behavioral Publications), 1976, 163 pp., no price listed.*

The Powerholders, *by David Kipnis. Chicago, Ill., University of Chicago Press, 1976, 227 pp., $12.50.*

From Group Dynamics to Group Psychoanalysis: Therapeutic Applications of Group Dynamic Understanding, *edited by Morton Kissen. Washington, D.C., Hemisphere Publishing Corp. (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 352 pp., $21.95.*

Basic Visual Processes and Learning Disability, *by Gerald Leisman. Springfield, Ill., Charles C Thomas, 1976, 407 pp., $27.50.*

Physiologic Disposition of Drugs of Abuse, *by Louis Lemberger, M.D., Ph.D., and Alan Rubin, Ph.D. Holliswood, N.Y., Spectrum Publications (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 390 pp., no price listed.*

The Dynamics of Human Service Delivery, *by Gilbert Levin and Edward B. Roberts, with Gary B. Hirsch, Deborah S. Kligler, Jack F. Wilder, and Nancy Roberts. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 257 pp., $16.00.*

Sex Education in Medicine, *edited by Harold I. Lief and Arno Karlen. Holliswood, N.Y., Spectrum Publications (New*

York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 151 pp., no price listed.

Film and Suspense, *by Altan Löker. Istanbul, Turkey, Altan Löker, 1976, 231 pp., $400 (paper).*

Scientist As Subject: The Psychological Imperative, *by Michael J. Mahoney. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 242 pp., no price listed.*

The Achievement Motive, *by David C. McClelland, John W. Atkinson, Russell A. Clark, and Edgar L. Lowell. New York, N.Y., Irvington Publishers (Halsted Press, John Wiley & Sons, distributor), 1976, 384 pp., no price listed.*

Information to Authors: Editorial Guidelines Reprinted from 140 Medical Journals, 1976–1977, *compiled by Harriet R. Meiss and Doris A. Jaeger. New York, N.Y., Gustave L. and Janet W. Levy Library, Mount Sinai School of Medicine of the City University of New York, 1976, unnumbered pages, no price listed (paper).*

Managing Madness: The Case Against Civil Commitment, *by Kent S. Miller. New York, N.Y., Free Press (Macmillan Publishing Co.), 1976, 178 pp., $9.95.*

Acute Grief and the Funeral, *edited by Vanderlyn R. Pine, Austin H. Kutscher, David Peretz, Robert C. Slater, Robert DeBellis, Robert J. Volk, and Daniel J. Cherico. Springfield, Ill., Charles C Thomas, 1976, 291 pp., $16.50.*

Psychophysiology. Benchmark Papers in Animal Behavior, 6, *edited by Stephen W. Porges and Michael G.H. Coles. Stroudsburg, Pa., Dowden, Hutchinson & Ross (New York, N.Y., Halsted Press, John Wiley & Sons, distributor), 1976, 351 pp., $25.00.*

Keeping Patients in Psychiatric Treatment, *by Chaim M. Rosenberg and Anthony E. Raynes. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 161 pp., no price listed.*

Dialectic: Humanistic Rationale for Behavior and Development, *edited by J.F. Rychlak. New York, N.Y., S. Karger, 1976, 151 pp., $20.00 (paper).*

Marriage Contracts and Couple Therapy: Hidden Forces in Intimate Relationships, *by Clifford J. Sager, M.D. New York, N.Y., Brunner/Mazel, 1976, 330 pp., $15.00.*

Consciousness and Self-Regulation: Advances in Research, Vol. 1, *edited by Gary E. Schwartz and David Shapiro. New York, N.Y., Plenum Press, 1976, 385 pp., $18.95.*

Further Studies of Drug Users, Treatment Typologies, and Assessment of Outcomes During Treatment in DARP. The Effectiveness of Drug Abuse Treatment, Vol. III, *edited by S.B. Sells and D. Dwayne Simpson. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 456 pp., no price listed.*

Evaluation of Treatment Outcomes for 1971–1972 DARP Admission Cohort. The Effectiveness of Drug Abuse Treatment, Vol. IV, *edited by S.B. Sells and D. Dwayne Simpson. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 476 pp., no price listed.*

Clinical Pharmacology of Serotonin, *edited by F. Sicuteri and E. Schönbaum. New York, N.Y., S. Karger, 1976, 136 pp., $26.00 (paper).*

The Hot-House Plant: The Autobiography of a Young Girl, *by Yvonne Stevenson. London, England, Elek/Pemberton, 1976, 190 pp., $9.95.*

Anatomical Neuroendocrinology, *edited by Walter E. Stumpf and Lester D. Grant. New York, N.Y., S. Karger, 1976, 463 pp., $37.00.*

The Fear of Success, *by Leon Tec, M.D. New York, N.Y., Reader's Digest Press (Thomas Y. Crowell Co., distributor), 1976, 190 pp., $7.95.*

Ethics and Health Policy, *edited by Robert M. Veatch and Roy Branson. Cambridge, Mass., Ballinger Publishing Co. (J.B. Lippincott Co.), 1976, 324 pp., no price listed.*

Handbook of Medical Specialties, *by Henry Wechsler, Ph.D. New York, N.Y., Human Sciences Press (Behavioral Publications), 1976, 303 pp., no price listed (paper).*

Advances in the Drug Therapy of Mental Illness, *by the World Health Organization. Geneva, Switzerland, WHO (New York, N.Y., Q Corp., distributor), 1976, 170 pp., $12.00 (paper).*

ANNUAL INDEX

Following is the comprehensive index for volume 133 of the *Journal*, covering all material from January 1976 through December 1976. The complete citation for each article in the author index is listed under the name of the first author; joint authors are listed alphabetically with a cross-reference to the full citation. Book reviews appear in the author index under the name of the reviewer and in the subject index under the heading Books Reviewed; the books are arranged alphabetically by the surname of the book's first author.

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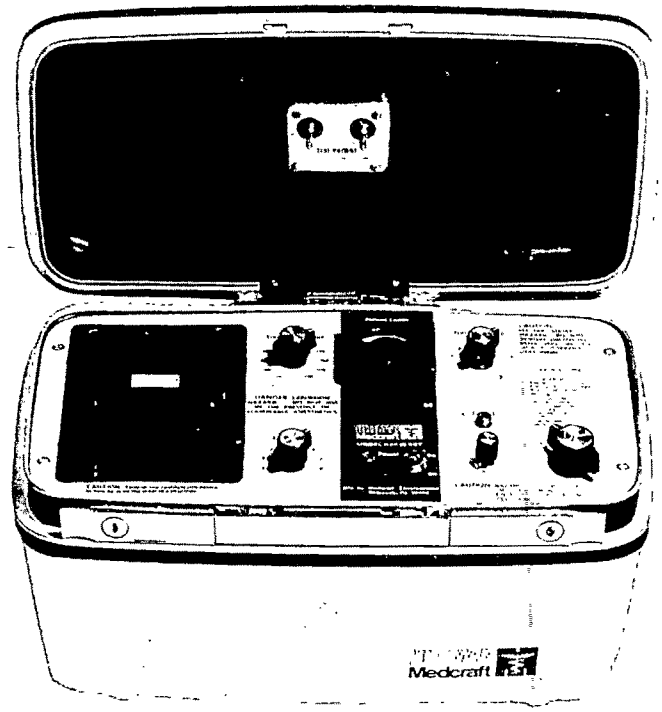
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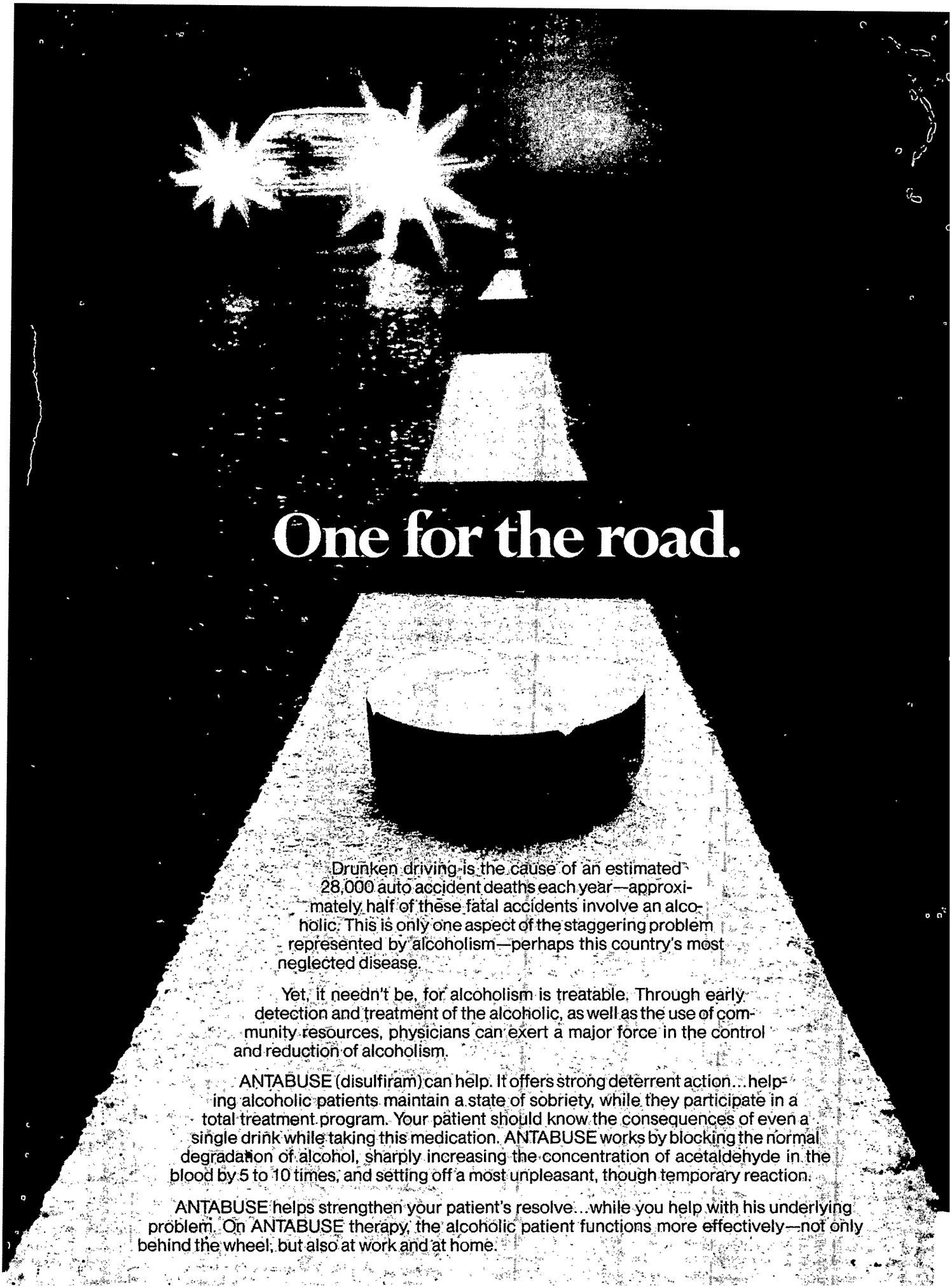
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BRIEF SUMMARY
(For full prescribing information, see package circular.)
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INDICATION: ANTABUSE is an aid in the management of selected chronic alcoholic patients who want to remain in a state of enforced sobriety so that supportive and psychotherapeutic treatment may be applied to best advantage. (Used alone, without proper motivation and without supportive therapy, ANTABUSE is not a cure for alcoholism, and it is unlikely that it will have more than a brief effect on the drinking pattern of the chronic alcoholic.)
CONTRAINDICATIONS: Patients who are receiving or have recently received metronidazole, paraldehyde, alcohol, or alcohol-containing preparations, e.g. cough syrups, tonics, and the like, should not be given ANTABUSE.
ANTABUSE is contraindicated in the presence of severe myocardial disease or coronary occlusion, psychoses, or hypersensitivity

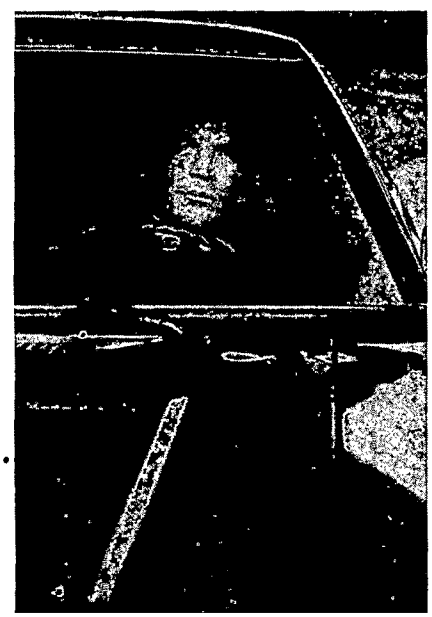
WARNINGS: ANTABUSE should never be administered to a patient when he is in a state of alcohol intoxication or without his full knowledge.
The physician should instruct relatives accordingly.

The patient must be fully informed of the ANTABUSE-alcohol reaction. He must be strongly cautioned against surreptitious drinking while taking the drug, and he must be fully aware of possible consequences. He should be warned to avoid alcohol in disguised form, *i.e.* in sauces, vinegars, cough mixtures, and even aftershave lotions and back rubs. He should also be warned that reactions may occur with alcohol up to 14 days after ingesting ANTABUSE.
THE ANTABUSE-ALCOHOL REACTION:
ANTABUSE plus alcohol, even small amounts, produces flushing, throbbing in head and neck, throbbing headache, respiratory difficulty, nausea, copious vomiting, sweating, thirst, chest pain, palpitation, dyspnea, hyperventilation, tachycardia, hypotension, syncope, marked uneasiness, weakness, vertigo, blurred vision, and confusion. In severe reactions there may be respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.
The intensity of the reaction varies with each individual, but is generally proportional to the amounts of ANTABUSE (disulfiram) and alcohol ingested. Mild reactions may occur in the sensitive individual when the blood alcohol concentration is increased to as little as 5 to 10 mg. per 100 cc. Symptoms are fully developed at 50 mg. per 100 cc., and unconsciousness usually results when the blood alcohol level reaches 125 to 150 mg.
The duration of the reaction varies from 30 to 60 minutes to several hours in the more severe cases, or as long as there is alcohol in the blood.
DRUG INTERACTIONS: Disulfiram appears to decrease the rate at which certain drugs are metabolized and so may increase the blood levels and the possibility of clinical toxicity of drugs given concomitantly.
Disulfiram should be used with caution in those patients receiving diphenylhydantoin and its congeners, since toxic levels of these antiepileptic agents have been reported during concomitant disulfiram therapy.
It may be necessary to adjust the dosage of oral anticoagulants upon beginning or stopping disulfiram, since disulfiram may prolong prothrombin time.
Patients taking isoniazid when disulfiram is given should be observed for the appearance of unsteady gait or marked changes in mental status and the disulfiram discontinued if such signs appear.
CONCOMITANT CONDITIONS: Because of the possibility of an accidental ANTABUSE-alcohol reaction, ANTABUSE (disulfiram) should be used with extreme caution in patients with any of the following conditions: diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis, hepatic cirrhosis or insufficiency.
USAGE IN PREGNANCY: The safe use of this drug in pregnancy has not been established. Therefore, ANTABUSE should be used during pregnancy only when, in the judgment of the physician, the probable benefits outweigh the possible risks.
PRECAUTIONS: It is suggested that every patient under treatment carry an Identification Card, stating that he is receiving ANTABUSE and describing the symptoms most likely to occur as a result of the ANTABUSE-alcohol reaction. In addition, this card should indicate the physician or institution to be contacted in emergency. (Cards may be obtained from Ayerst Laboratories upon request.)
Alcoholism may accompany or be followed by dependence on narcotics or sedatives. Barbiturates have been administered concurrently with ANTABUSE (disulfiram) without untoward effects, but the possibility of initiating a new abuse should be considered.
Base line and follow-up transaminase tests (10-14 days) are suggested to detect any hepatic dysfunction that may result with ANTABUSE therapy. In addition, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.
ADVERSE REACTIONS: (See Contraindications, Warnings, and Precautions.)
Optic neuritis, peripheral neuritis, and polyneuritis may occur following administration of ANTABUSE.
Occasional skin eruptions are, as a rule, readily controlled by concomitant administration of an antihistaminic drug.
In a small number of patients, a transient mild drowsiness, fatigability, impotence, headache, acneform eruptions, allergic dermatitis, or a metallic or garlic-like aftertaste may be experienced during the first two weeks of therapy. These complaints usually disappear spontaneously with the continuation of therapy or with reduced dosage.
Psychotic reactions have been noted, attributable in most cases to high dosage, combined toxicity (with metronidazole or isoniazid), or to the unmasking of underlying psychoses in patients stressed by the withdrawal of alcohol.
One case of cholestatic hepatitis has been reported, but its relationship to ANTABUSE has not been unequivocally established.
DOSAGE AND ADMINISTRATION: ANTABUSE (disulfiram) should never be administered until the patient has abstained from alcohol for at least 12 hours.
INITIAL DOSAGE SCHEDULE: In the first phase of treatment, a maximum of 500 mg. daily is given in a single dose for one to two weeks. Although usually taken in the morning, ANTABUSE may be taken on retiring by patients who experience a sedative effect. Alternatively, to minimize, or eliminate, the sedative effect, dosage may be adjusted downward.
MAINTENANCE REGIMEN: The average maintenance dose is 250 mg. daily (range, 125 to 500 mg.); it should not exceed 500 mg. daily.
NOTE: Occasional patients, while seemingly on adequate maintenance doses of ANTABUSE, report that they are able to drink alcoholic beverages with impunity and without any symptomatology. All appearances to the contrary, such patients must be presumed to be disposing of their tablets in some manner without actually taking them. Until such patients have been observed reliably taking their daily ANTABUSE tablets (preferably crushed and well mixed with liquid), it cannot be concluded that ANTABUSE is ineffective.
DURATION OF THERAPY: The daily, uninterrupted administration of ANTABUSE must be continued until the patient is fully recovered socially and a basis for permanent self-control is established. Depending on the individual patient, maintenance therapy may be required for months or even years.
TRIAL WITH ALCOHOL: During early experience with ANTABUSE, it was thought advisable for each patient to have at least one supervised alcohol-drug reaction. More recently, the test reaction has been largely abandoned. Furthermore, such a test reaction should never be administered to a patient over 50 years of age. A clear, detailed, and convincing description of the reaction is felt to be sufficient in most cases.
However, where a test reaction is deemed necessary, the suggested procedure is as follows:
After the first one to two weeks' therapy with 500 mg. daily, a drink of 15 cc. (1/2 oz.) of 100 proof whiskey or equivalent is taken slowly. This test dose of alcoholic beverage may be repeated once only so that the total dose does not exceed 30 cc. (1 oz.) of whiskey. Once a reaction develops, no more alcohol should be consumed. Such tests should be carried out only when the patient is hospitalized, or comparable supervision and facilities, including oxygen, are available.
MANAGEMENT OF ANTABUSE (DISULFIRAM)-ALCOHOL REACTION: In severe reactions, whether caused by an excessive test dose or by the patient's unsupervised ingestion of alcohol, supportive measures to restore blood pressure and treat shock should be instituted. Other recommendations include: oxygen, carbogen (95 per cent oxygen and 5 per cent carbon dioxide), vitamin C intravenously in massive doses (1 Gm.), and ephedrine sulfate. Antihistamines have also been used intravenously. Potassium levels should be monitored particularly in patients on digitalis since hypokalemia has been reported.
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by Elaine Hilberman, M.D.

Mythologies about rape are legion. However, in recent years behavioral scientists have accumulated a body of information about rape and about an unfolding series of reactions experienced by the victim after rape. The aim of this concise, tightly reasoned book is to summarize what is now known about the needs and experiences of the victim and her family, and to provide a framework in which the clinician can more knowledgeably supply assistance and support. This document, published by the American Psychiatric Association, is the result of a project of the Association's Committee on Women.

Pointing out that the profound impact of rape stress is best understood in the context of rape as "a crime against the person and not the hymen," Dr. Hilberman sees rape as the ultimate violation of the self short of homicide, as an act of violence and humiliation in which not only is the victim's very existence threatened, and her inner and most private space invaded, but her autonomy and control are totally demolished. Dr. Hilberman shows that if and when the victim reports the crime, she is confronted with a complex series of yet additional stresses growing out of her contact with the hospital, police, courts, media and community opinion. Additionally, her crisis differs from other crises in that her usual social support system is likely to be disrupted. Her immediate needs are for empathy and safety, and a sense of control over what is happening in her dealings with the several agencies. Dr. Hilberman shows that in the absence of sensitivity to these needs, the experience of reporting becomes another assault.

This book presents a professional, sobering, and balanced picture of the problems of the rape victim and details what the clinician must know—about local hospital policy, criminal justice procedure, rape statutes, and community attitudes and services—in order to be able to treat victims with an understanding of the larger context in which rape occurs.

ELAINE HILBERMAN, M.D., *is in the Department of Psychiatry at the University of North Carolina School of Medicine.*

Paperback edition—$5.00 each, may be ordered from the AMERICAN PSYCHIATRIC ASSOCIATION, Publication Sales, 1700 18th St., N.W., Washington, D.C. 20009.

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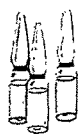
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Perphenazine can lower the convulsive threshold in susceptible individuals; it should be used with caution in patients with convulsive disorders. If the patient is being treated with an anticonvulsant agent, increased dosage of that agent may be required when perphenazine is used concomitantly.

Perphenazine should be used with caution in patients with psychic depression.

Perphenazine is not recommended for children under 12 years of age.

Perphenazine may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a car or operating machinery.

PRECAUTIONS As with any potent medication, patients receiving perphenazine should be under medical supervision, particularly if they are receiving high doses. Patients who have had any severe reaction to phenothiazines or to imipramine should be treated cautiously, under close medical supervision.

Although the following adverse reactions have not been reported in patients treated with perphenazine, the possibility that they might occur with TRILAFON should be considered: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, eosinophilia); liver damage (biliary stasis); narrowing of the visual fields; pigmentation of the retina, cornea, or lens; cerebral edema; polyphagia; photophobia; hyperpyrexia.

If hypotension develops, levarterenol (norepinephrine) can be used, but not epinephrine, because epinephrine's action is blocked and partly reversed by perphenazine. Severe, acute hypotension has occurred with the use of phenothiazines and is of particular concern in patients with mitral insufficiency or pheochromocytoma.

A significant rise in body temperature may indicate an idiosyncratic reaction to perphenazine; treatment with perphenazine should be stopped if this occurs.

The antiemetic effect of perphenazine can obscure signs of toxicity due to overdosage of other drugs, or mask the symptoms of disease (eg, brain tumor or intestinal obstruction).

Contact dermatitis has been reported with a perphenazine solution; therefore, contact of hands or clothing by those handling perphenazine solutions should be avoided.

POTENTIATION Since phenothiazines can potentiate the central-nervous-system-depressant actions of opiates, antihistamines, barbiturates, and alcohol, less than the usual dosage of these agents is required when they are administered concomitantly with TRILAFON. Patients should be cautioned that their response to alcohol may be increased while they are being treated with TRILAFON.

Phenothiazines also potentiate the effects of atropine, heat, and phosphorus insecticides, and should be used with caution in persons exposed to these agents.

ADVERSE REACTIONS *Extrapyramidal reactions:* dystonia including protrusion, discoloration, aching and rounding of the tongue; tonic spasm of the masticatory muscles, tight feeling in the throat, slurred speech, dysphagia, oculogyric crisis, trismus, torticollis, retrocollis, muscle weakness, and aching and numbness of the limbs, akathisia; motor restlessness; dyskinesia, parkinsonism; hyperreflexia; and ataxia. The incidence and severity of these reactions usually increase with increased dosage, but have occurred in some patients receiving low dosage. Reduction in dosage or treatment with an antispasmodic agent will usually control extrapyramidal reactions. In some instances, however, these reactions may persist after discontinuation of treatment with perphenazine.

Persistent tardive dyskinesia: As with all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. The symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of extremities. There is no known effective treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been reported that fine, vermicular movements of the tongue may be an early sign of the syndrome, and if the medication is stopped at that time the syndrome may not develop.

Allergic reactions: erythema, pruritus, urticaria, eczema, anaphylactoid reactions, and local and generalized edema. In extremely rare instances, individual idiosyncrasy or hypersensitivity to phenothiazines has resulted in cerebral edema, circulatory collapse, and death. Photosensitization, asthma, and exfoliative dermatitis have also occurred in patients treated with phenothiazines.

Autonomic reactions: blurred vision, dry mouth or salivation, nasal congestion, nausea, vomiting, hypertension, tachycardia, hypotension, anorexia, urinary frequency or incontinence, and constipation. Significant autonomic effects have been infrequent in patients receiving less than 24 mg. perphenazine daily.

Other reactions: endocrine disturbances (lactation, gynecomastia, galactorrhea, disturbances in the menstrual cycle), headaches, mild insomnia, altered cerebrospinal fluid proteins, ECG abnormalities, reactivation of psychosis, paradoxical excitement, paranoid-like reactions, catatonia, and systemic lupus erythematosus-like syndrome. Hypnotic effects appear to be minimal, particularly in patients who are permitted to remain active. The following adverse reactions, though rare, have also been reported to be associated with perphenazine treatment: agranulocytosis; jaundice; hyperpigmentation of the skin; grand mal convulsions; failure of ejaculation; hyperglycemia.

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CASE STUDIES OF THE CLINICAL INTERPRETATION OF THE BENDER GESTALT TEST: Illustrations of the Interpretive Process for Graduate Training and Continuing Professional Education *by* **Clifford M. DeCato** *and* **Robert J. Wicks,** *both of Hahnemann Medical College and Hospital, Philadelphia, Pennsylvania. Foreword by* **Zygmunt A. Piotrowski.** Through the presentation of both child and adult cases, this book establishes the Bender Gestalt Test (BGT) as an effective means of assessing personality dynamics, developmental level and psychopathology. It goes beyond the mere listing of diagnostic indicators to clearly illustrate how clinicians may integrate these findings with those of other investigative sources. Basic instructions for the administration of the BGT are also presented. *'76, 152 pp., 31 il., $9.75*

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INVOLUNTARY TREATMENT OF THE MENTALLY ILL: The Problem of Autonomy *by* **Michael Alfred Peszke,** *Univ. of Connecticut School of Medicine, Hartford.* This pointed review puts the problem of involuntary treatment of mental illness into historical perspective and looks at it objectively, recognizing that mental illness cannot simply be legislated out of existence. The author suggests that programs designed to meet the needs of the mentally ill be based on the right of each person to his or her own autonomy. Recommendations are also proposed whereby no one in our society is deprived of enlightened and appropriate treatment, while no one is deprived of personal freedom in a thoughtless or arbitrary fashion. *'75, 176 pp., 1 il., $10.75*

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Serentil Prescribing Information, PDR, 1976.

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Please see next page for a brief summary of the prescribing information, including contraindications and adverse reactions.

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Contraindications: Severe central nervous system depression, comatose states and hypersensitivity to the drug.
Warnings: Administer cautiously and increase dosage gradually to patients participating in activities requiring complete mental alertness (e.g., driving). The safety of this drug in pregnancy has not been established; hence it should be given only when the anticipated benefits exceed the possible risk to mother and fetus. Not recommended for use in children under 12 years of age since safe conditions for this use have not been established. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides.
Precautions: Ocular changes have been seen with other phenothiazines but, to date, have not been related to mesoridazine. Because of possible hypotensive effects, reserve parenteral administration for bedfast patients or acute ambulatory cases, and keep patient lying down for at least one-half hour after injection. Leukopenia and/or agranulocytosis have been attributed to phenothiazine therapy. A single case of transient granulocytopenia has been associated with mesoridazine. Patients receiving anticonvulsant medication should be continued on that regimen while receiving mesoridazine to prevent possible convulsive seizures. As with most medications, the dosage of mesoridazine should be adjusted to the needs of the individual and the lowest effective dosage should always be used.
Adverse Reactions: Mesoridazine has demonstrated a remarkably low incidence of adverse reactions compared with other phenothiazine compounds. Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (opisthotonos). Dry mouth, nausea and vomiting, fainting, stuffy nose, photophobia, constipation and blurred vision have occurred. Inhibition of ejaculation, impotence, enuresis, incontinence. Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema. Hypotension, tachycardia, EKG changes. The following reactions have occurred with



phenothiazines and should be considered: miosis, obstipation, anorexia, paralytic ileus. Erythema, exfoliative dermatitis, contact dermatitis. Agranulocytosis, leukopenia, eosinophilia, thrombocytopenia, anemia, aplastic anemia, pancytopenia. Fever, laryngeal edema, angioneurotic edema, asthma. Jaundice, biliary stasis. Changes in terminal portion of the EKG, including prolongation of the Q-T interval, lowering and inversion of the T wave and appearance of a wave tentatively identified as a bifid T or a U wave have been observed with phenothiazines, including mesoridazine. These appear to be reversible and due to altered repolarization, not myocardial damage. While there is no evidence that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients showing characteristic electrocardiographic changes while taking the drug. While proposed, periodic electrocardiograms would appear to be of questionable value as a predictive device. Hypotension, rarely resulting in cardiac arrest has also been noted. Akathisia, agitation, motor restlessness, dystonic reactions, trismus, torticollis, opisthotonos, oculogyric crises, tremor, muscular rigidity, akinesia. As with all antipsychotics, tardive dyskinesia may appear on long-term therapy or after long-term therapy is discontinued. Risks seem to be greater in elderly patients on high dose therapy, especially females. Discontinue all antipsychotic agents if the symptoms of tardive dyskinesia syndrome appear. (See full prescribing information for description of the symptoms of the tardive dyskinesia syndrome). Menstrual irregularities, altered libido, gynecomastia, lactation, weight gain, edema, false positive pregnancy tests. Retention, incontinence. Hyperpyrexia. behavioral effects suggestive of a paradoxical reaction, including excitement, bizarre dreams, aggravation of psychoses and toxic confusional states. Following long-term therapy, a peculiar skin-eye syndrome marked by progressive pigmentation of areas of the skin or conjunctiva and/or accompanied by discoloration of exposed sclera and cornea; stellate or irregular opacities of anterior lens and cornea. Systemic lupus erythematosus-like syndrome.
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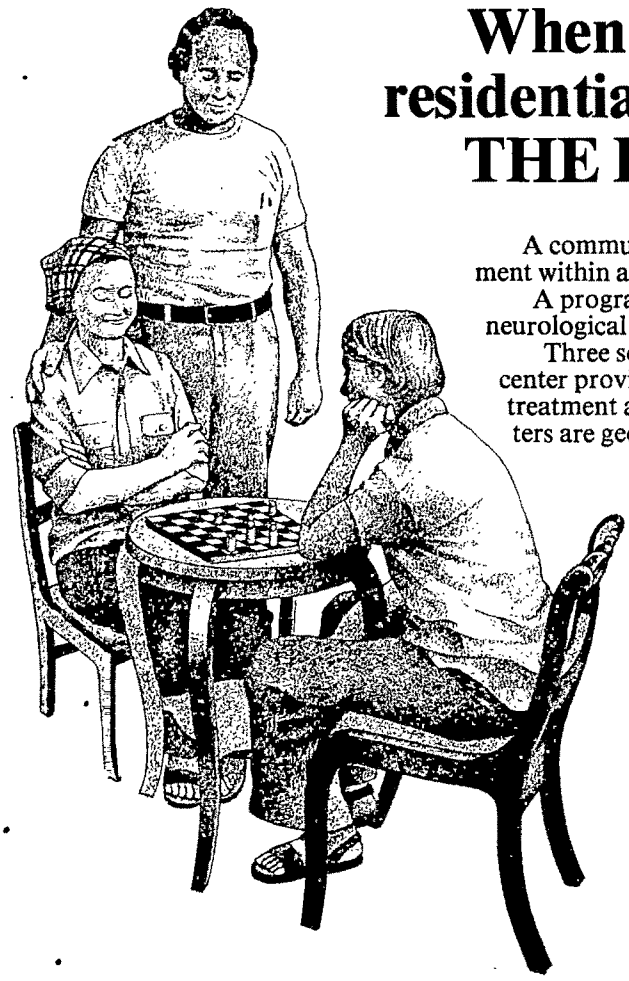
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For a brief summary of prescribing information

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Contraindications: Known hypersensitivity. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with amitriptyline HCl. Initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with angle-closure glaucoma or increased intraocular pressure; in patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and actation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child. Not recommended for patients under 12 years of age.

Precautions: Schizophrenic patients may develop increased symptoms of psychosis; patients with paranoid symptomatology may have an exaggeration of such symptoms; manic depressive patients may experience a shift to the manic phase. In these circumstances, the dose of amitriptyline HCl may be reduced or a major tranquilizer, such as perphenazine, may be administered concurrently.

When given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required; paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs. Use cautiously in patients receiving large doses of ethchlorvynol, since transient delirium has been reported on concurrent administration. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains until significant remission occurs. Potentially suicidal patients should not have access to large quantities of this drug. Prescriptions should be written for the smallest amount feasible. Concurrent electroshock therapy may increase the hazards associated with such therapy; such treatment should be limited to patients for whom it is essential. When possible, discontinue the drug several days before elective surgery. Both elevation and lowering of blood sugar levels have been reported. Use with caution in patients with impaired liver function.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered. *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, increased intraocular pressure, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, leukopenia, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling, black tongue, rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido, elevation and lowering of blood sugar levels. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, alopecia. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

Overdosage: Hospitalize as soon as possible all patients suspected of having taken an overdose. Treatment is symptomatic and supportive. In addition, the intravenous administration of 1 to 3 mg physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage should be repeated as required, particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; tablets containing 75 mg and 100 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100; tablets containing 150 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 30 and 100; for intramuscular use, in 10-ml vials containing per ml: 10 mg amitriptyline HCl, 44 mg dextrose, 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives, and water for injection q.s. 1 ml.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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addendum

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To further simplify once-daily therapy for many depressed patients

Tablets

Elavil®
(Amitriptyline HCl | MSD)

ONE TABLET, ONCE DAILY

—an appropriate way to prescribe for many depressed adult outpatients. Because of its simplicity, this regimen helps improve patient compliance. Of course, ELAVIL may also be prescribed in divided daily doses.

ONCE-DAILY DOSAGE SCHEDULE FOR ADULT OUTPATIENTS:

A single 75-mg tablet
Usual starting dosage



A single 100-mg tablet
Maximum starting dosage

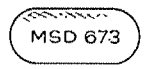


A single 50-mg tablet
Minimum starting dosage



Dosage may be increased by 25 or 50 mg as necessary until a total of 150 mg per day is reached.

A single 150-mg tablet
Maximum daily dosage



ELAVIL MAY ALSO BE PRESCRIBED IN DIVIDED DAILY DOSES

The 25-mg tablet



This strength may prove useful when therapy is initiated with divided daily doses in adult outpatients. Starting dosage is usually 75 mg daily. If necessary, this dosage may be increased gradually to a total of 150 mg a day. Increases are made preferably in the late afternoon or bedtime dose.

The 10-mg tablet

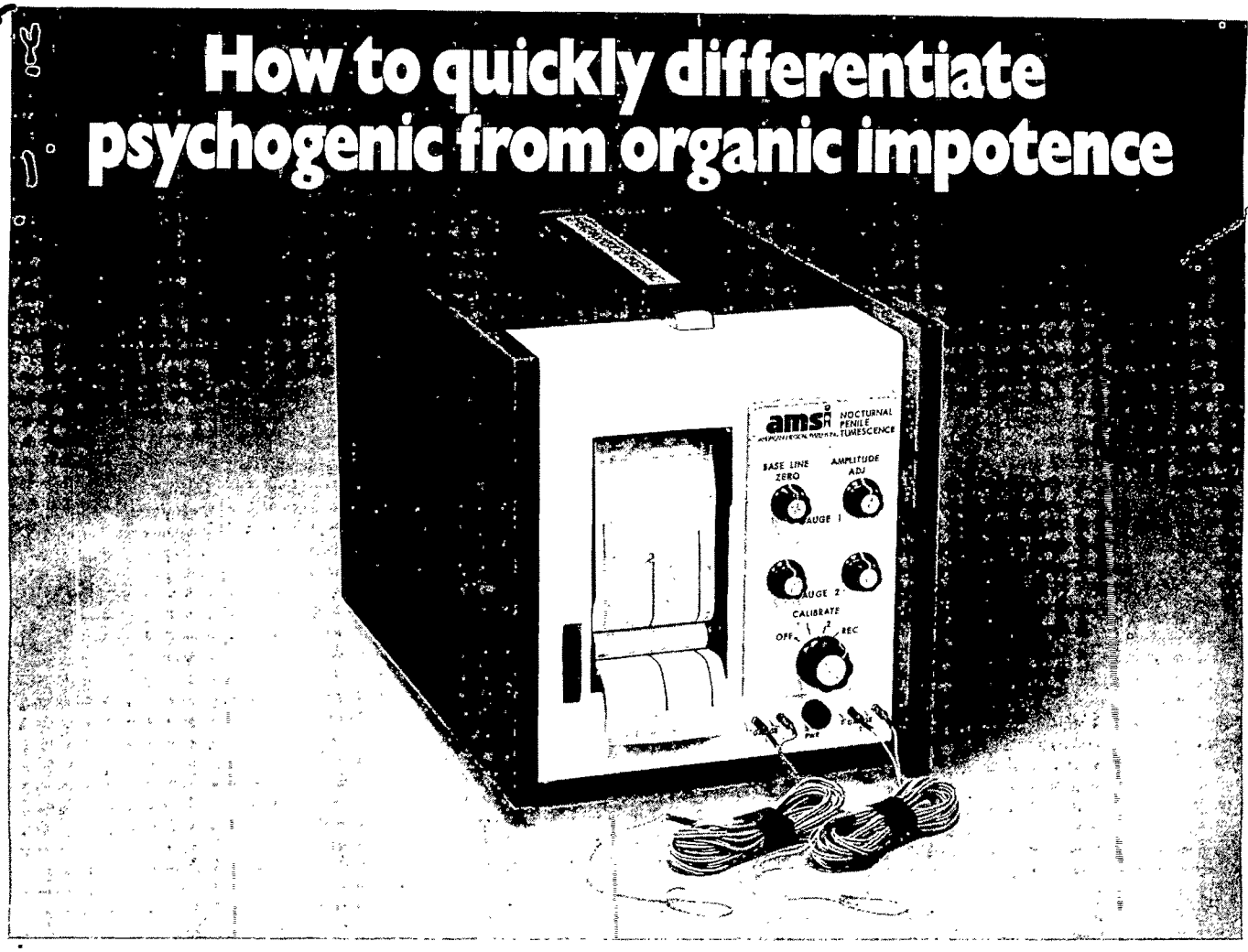


This strength may prove useful for patients who require lower doses, e.g., adolescent and elderly patients. For these patients who can not tolerate higher doses, 10 mg three times a day with 20 mg at bedtime may be satisfactory.

A sedative effect may be apparent before the antidepressant effect of ELAVIL is noted. An adequate therapeutic effect may take as long as 30 days to develop.

NOTE: The usual maintenance dosage of ELAVIL is 50 to 100 mg per day which may be given in a single dose preferably at bedtime. In some patients 40 mg per day is sufficient. This drug is not recommended for patients under 12 years of age.

How to quickly differentiate psychogenic from organic impotence



The American Medical Systems Nocturnal Penile Tumescence Monitor (Model N-7600) has been developed to aid in the diagnosis and study of male erectile impotence.

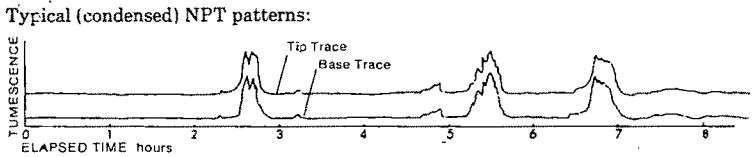
Test results from the monitor help the physician to clearly and objectively differentiate pyschogenic from organic cases of impotence. And in turn to determine the appropriate course of psycho or medical therapy.

Utilizing two mercury strain gauges that are positioned at the base and at the tip of the penis, the NPT Monitor measures minute variations in penile size during the Rapid Eye Movement stages of sleep. The test results are amplified and recorded on a strip chart mechanism as a permanent patient record for subsequent evaluation.

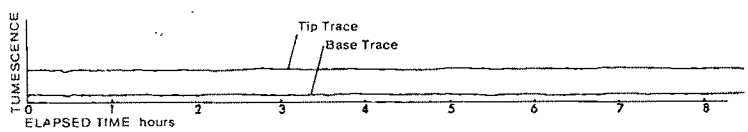
This rugged, lightweight monitor is easy to operate, allowing NPT testing in the hospital, sleep laboratory, physician's office or by the patient in his home.

For further information or scientific references, mail the coupon today or call collect: 612-927-4211.

Typical (condensed) NPT patterns:



This Tracing indicates significant tumescence activity. Organic impotence can be ruled out.



This Tracing has no tumescence activity strongly indicating that impotence is of an organic nature.

Mail to: American Medical Systems, Inc.
3312 Gorham Avenue, Minneapolis, MN 55426. Dept. JU-86. AJP 126

Please send additional information and scientific references on the American Medical Systems Nocturnal Penile Tumescence Monitor Model N-7600.

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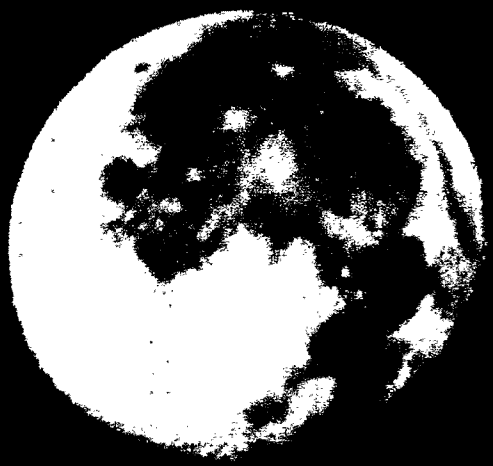
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(Doxepin HCl)
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And the Management of Disturbed Sleep Patterns in Anxiety/Depression

Disturbed sleep patterns are a familiar component of the symptom complex seen in patients with anxiety and/or depression.

One study[1] has shown that doxepin [Adapin] is helpful in providing symptomatic relief of sleep disturbances associated with anxiety and depression, "allowing patients to fall asleep more rapidly and feel more rested upon awakening."

Another study[2] points out that doxepin [Adapin] given "at bedtime to outpatients with mixed anxiety and depression will yield as much improvement as can be obtained by giving the drug three times a day."

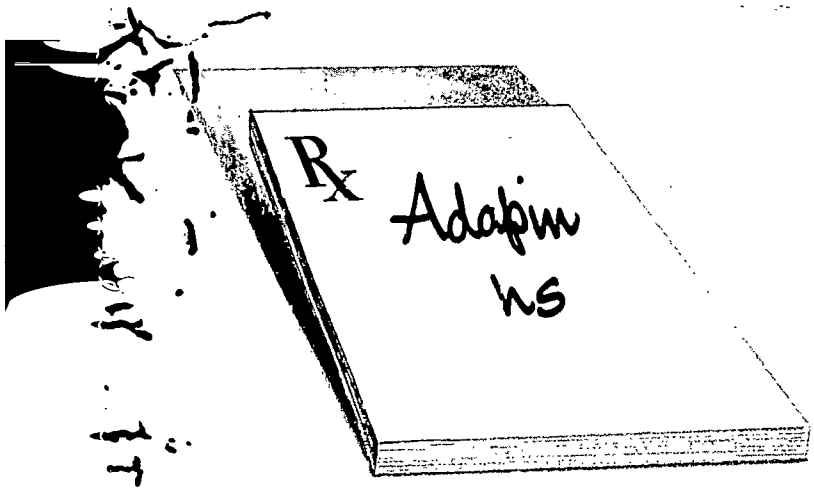
So, a single dose of Adapin, given at bedtime can often help promote a restful night's sleep for patients with mixed anxiety and depression. Other clinical benefits include:

- rapid antianxiety effect
- distinct clinical brightening of mood—usually within three to four weeks
- low incidence of side effects
- suitability for long-term usage

1. Goldberg HL, Finnerty RJ: The use of doxepin in the treatment of symptoms of anxiety neurosis and accompanying depression: a collaborative controlled study. *Am J Psychiatry* 129:106-109, 1972.
2. Goldberg HL, Finnerty RJ, Cole JO: Doxepin: Is a single daily dose enough? *Am J Psychiatry* 131:1027-1029, 1974.

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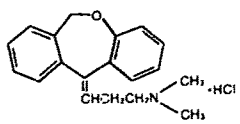
ADAPIN®

(Doxepin HCl)

Prescribing information:

DESCRIPTION

Adapin (doxepin HCl) is an isomeric mixture of N, N-dimethyl-dibenz(b,e) oxepin- $\Delta^{11(6H)}$, γ propylamine hydrochloride.



ACTIONS

Adapin has a variety of pharmacological actions with its predominant action on the central nervous system. While its mechanism of action is not known, studies have demonstrated that it is neither a monoamine oxidase inhibitor nor a primary stimulant of the central nervous system.

INDICATIONS

In controlled clinical evaluations, **Adapin** has shown marked antianxiety and significant antidepressant effects. **Adapin** has been found to be well tolerated even in elderly patients.

Adapin is indicated for the treatment of patients with:

1. Psychoneurotic anxiety and/or depressive reactions.
2. Mixed symptoms of anxiety and depression.
3. Anxiety and/or depression associated with alcoholism.
4. Anxiety associated with organic disease.
5. Psychotic depressive disorders including involutional depression and manic-depressive reactions.

Target symptoms of psychoneurosis that respond particularly well to **Adapin** include: anxiety, tension, depression, somatic symptoms and concerns, insomnia, guilt, lack of energy, fear, apprehension and worry.

Because **Adapin** provides antidepressant as well as antianxiety effects, it is of particular value in patients in whom anxiety masks depression. Patients who have not responded to other antianxiety or antidepressant drugs may benefit from **Adapin.**

In a large series of patients systematically observed for withdrawal symptoms, none were reported—a finding which is consistent with the virtual absence of euphoria as a side effect and the lack of addictive potential characteristic of this type of chemical compound.

CONTRAINDICATIONS

Because **Adapin** has an anticholinergic effect, it is contraindicated in patients with glaucoma or a tendency toward urinary retention.

Use of **Adapin** is contraindicated in patients who have been found hypersensitive to it.

WARNINGS

Usage in Pregnancy—Adapin has not been evaluated in pregnant patients. Therefore, it should not be used during pregnancy unless, in the judgment of the physician, it is essential to the welfare of the patient.

In animal reproduction studies of **Adapin (doxepin hydrochloride),** gross ar microscopic examination of the offspring gave no evidence of drug-related teratogenic effect. Following doses of up to 25 mg./kg./day for 8 to 9 month no changes were observed in the number of live births, litter size, or lactatic A decreased rate of conception was observed when male rats were given 25 mg./kg./day for prolonged periods—an effect which has occurred with other psychotropic drugs and has been attributed to drug effect on the centr and/or autonomic nervous systems.

Usage in Children—The use of **Adapin** in children under 12 years of age is r recommended, because safe conditions for its use have not been establishe

MAO Inhibitors—Serious side effects and even death have been reported following the concomitant use of certain drugs with MAO inhibitors. Therefo MAO inhibitors should be discontinued at least two weeks prior to the cauti initiation of therapy with **Adapin.** The exact length of time may vary and is dependent upon the particular MAO inhibitor being used, the length of time has been administered, and the dosage involved.

PRECAUTIONS

Drowsiness may occur with **Adapin;** therefore, patients should be warned of its possible occurrence and cautioned against driving a motor vehicle or operating hazardous machinery while taking the drug.

Patients should also be cautioned that the effects of alcoholic beverages ma be increased.

Since suicide is an inherent risk in depressed patients and remains a risk through the initial phases of improvement, depressed patient should be closely supervised.

Although **Adapin** has shown effective tranquilizing activity, the possibility of activating or unmasking latent psychotic symptoms should be kept in mind.

Compounds structurally related to **Adapin** can block the effects of guanethidine and similarly acting compounds. However, at the usual clinica dosages, 75 mg. to 150 mg. per day, **Adapin** has been given concomitantly with guanethidine without blocking its antihypertensive effect. But at dosag of 300 mg. per day or higher, **Adapin** has exerted a significant blocking effec

Adapin, like other structurally related psychotropic drugs, potentiates norepinephrine response in animals. But this effect has not been observed v **Adapin** in humans, which is in accord with the low incidence of tachycardia reported clinically.

ADVERSE REACTIONS

Anticholinergic Effects: Dry mouth, blurred vision and constipation have be reported. These are usually mild, and often subside as therapy is continued or dosage reduced.

Central Nervous System Effects: Drowsiness has been observed. It usually occurs early in the course of therapy and tends to subside as therapy continues. (See Dosage and Administration section.)

Cardiovascular Effects: Tachycardia and hypotension have been reported infrequently.

Other infrequently reported adverse effects include extrapyramidal symptom gastrointestinal reactions, secretory effects (such as increased sweating), weakness, dizziness, fatigue, weight gain, edema, paresthesias, flushing, chills, tinnitus, photophobia, decreased libido, rash, and pruritus.

DOSAGE AND ADMINISTRATION

In most patients with mild to moderate anxiety and/or depression: 10 mg. to 25 mg. t.i.d. to start. A starting dosage of 10 mg. t.i.d. for a period of four days may reduce the initial drowsiness experienced by some patients and may be tried in cases where drowsiness is clinically undesirable. Decre or increase the dosage at appropriate intervals according to individual response. Usual optimum dosage is 75 mg. to 150 mg. per day.

In some patients with mild symptomatology or emotional symptoms accompanying organic disease, dosage as low as 25 mg. to 50 mg. per day has provided effective control.

In more severe anxiety and/or depression: 50 mg. t.i.d. may be required to start—if necessary, gradually increase to 300 mg. per day. Additional effectiveness is rarely obtained by exceeding 300 mg. per day.

Although optimal antidepressant response may not be evident for two to three weeks, antianxiety activity is rapidly apparent.

OVERDOSAGE

Symptoms—An increase of any of the reported adverse reactions, primarily excessive sedation and anticholinergic effects such as blurred vision and dr mouth. Other effects may be: pronounced tachycardia, hypotension and extrapyramidal symptoms.

Treatment—Essentially symptomatic; supportive therapy in the case of hypotension and excessive sedation.

HOW SUPPLIED

Each capsule contains doxepin, as the hydrochloride, 10 mg. (NDC 0018-0356), 25 mg. (NDC 0018-0357), and 50 mg. (NDC 0018-0358) capsules in bottles of 100 and 1000.

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(Note: $NZ100 equals approximately £55 sterling; $US100)

Information about the Department may be obtained from the Professor of Psychological Medicine, The Christchurch Clinical School, Christchurch, New Zealand.

Further particulars are available from the Secretary-General, Association of Commonwealth Universities, (Appointments), 36 Gordon Square, London WC1H OPF, or from the undersigned.

Applications, quoting reference A.76/62, close in London, and with the undersigned in New Zealand on 31 December 1976.

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brand of
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in Psychiatry."



Messenger Mask, Dene culture, Anvik, Alaska. Festival mask representing legendary cannibal woman's son who lured victims for his mother.

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FROM THE WITHDRAWN AND APATHETIC TO THE ANXIOUS AND OVERACTIVE, 'STELAZINE' HELPS RETURN THE PSYCHOTIC PATIENT TO REALITY AND CAN FACILITATE THERAPEUTIC CONTACT AND RAPPORT.

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- SELDOM CAUSES EXCESSIVE SEDATION
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Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications
Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: For the management of the manifestations of psychotic disorders.

Possibly effective: To control excessive anxiety, tension and agitation as seen in neuroses or associated with somatic conditions.

'Stelazine' has not been shown effective in the management of behavioral complications in patients with mental retardation.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Comatose or greatly depressed states due to C.N.S. depressants; blood dyscrasias; bone marrow depression; liver damage.

Warnings: Caution patients about activities requiring alertness (e.g., operating vehicles or machinery), especially during the first few days' therapy.

Use in pregnancy only when necessary for patient's welfare.

Precautions: Use cautiously in angina. Avoid high doses and parenteral administration when cardiovascular system is impaired. Antiemetic effect may mask signs of toxic drug overdosage or physical disorders. Additive effect is possible with other C.N.S. depressants. Prolonged administration of high doses may result in cumulative effects with severe C.N.S. or vasomotor symptoms. If retinal changes occur, discontinue drug. Agranulocytosis, thrombocytopenia, pancytopenia, anemia, cholestatic jaundice, liver damage have been reported.

Adverse Reactions: Drowsiness, dizziness, skin reactions, rash, dry mouth, insomnia, amenorrhea, fatigue, muscular weakness, anorexia, lactation, blurred vision. Neuromuscular (extrapyramidal) reactions: motor restlessness, dystonias, pseudo-parkinsonism, persistent tardive dyskinesia.

Other adverse reactions reported with Stelazine (trifluoperazine HCl, SK&F) or other phenothiazines: Some adverse effects are more frequent or intense in specific disorders (e.g., mitral insufficiency or pheochromocytoma).

Grand mal convulsions; altered cerebrospinal fluid proteins; cerebral edema; prolongation and intensification of the action of C.N.S. depressants, atropine, heat, and organophosphorus insecticides; nasal congestion, headache, nausea, constipation, obstipation, adynamic ileus, inhibition of ejaculation; reactivation of psychotic processes, catatonic-like states; hypotension (sometimes fatal); cardiac arrest; leukopenia, eosinophilia, pancytopenia, agranulocytosis, thrombocytopenic purpura; jaundice, biliary stasis; menstrual irregularities, galactorrhea, gynecomastia, false positive pregnancy tests; photosensitivity, itching, erythema, urticaria, eczema up to exfoliative dermatitis; asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions; peripheral edema; reversed epinephrine effect; hyperpyrexia; a systemic lupus erythematosus-like syndrome; pigmentary retinopathy; with prolonged administration of substantial doses, skin pigmentation, epithelial keratopathy, and lenticular and corneal deposits. EKG changes have been reported, but relationship to myocardial damage is not confirmed. Discontinue long-term, high-dose therapy gradually. NOTE: Sudden death in patients taking phenothiazines (apparently due to cardiac arrest or asphyxia due to failure of cough reflex) has been reported, but no causal relationship has been established.

Supplied: Tablets, 1 mg., 2 mg., 5 mg. and 10 mg., in bottles of 100; in Single Unit Packages of 100 (intended for institutional use only); Injection, 2 mg./ml.; and Concentrate (intended for institutional use only) 10 mg./ml.

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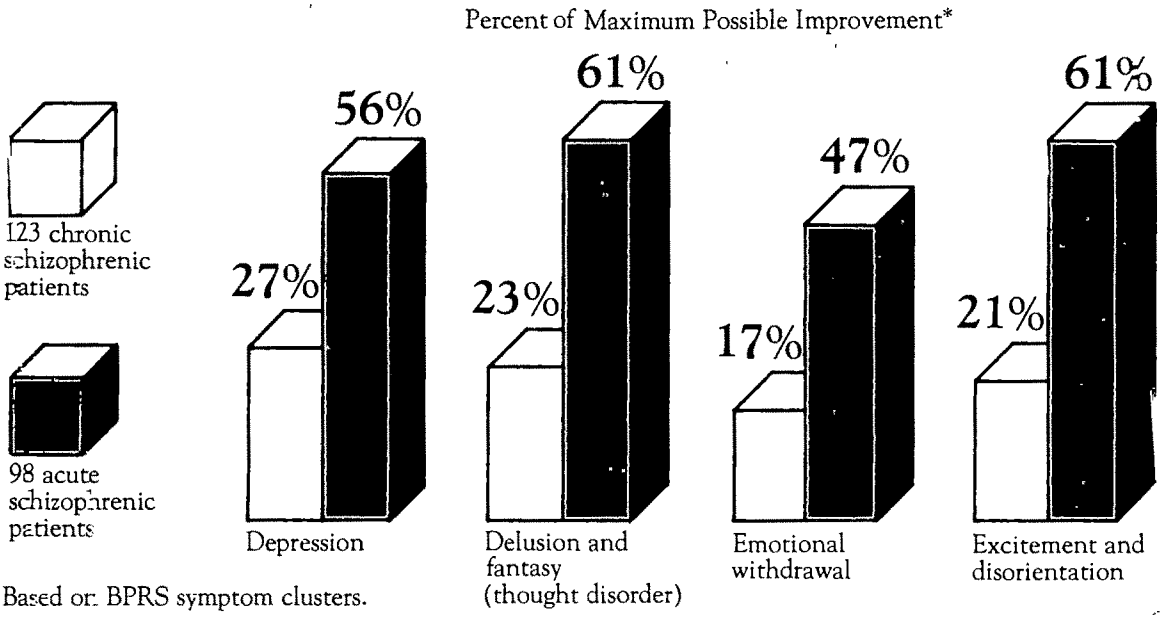
evaluated by psychiatrists—BPRS (Brief Psychiatric Rating Scale), CGI (Clinical Global Impression)

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compared with various other agents including chlorpromazine, trifluoperazine, thiothixene, as well as placebo—from 11 published, controlled/double-blind studies involving 441 patients[1]

helps control symptoms of acute and chronic schizophrenia

Evaluation (by BPRS) of symptomatic response in 221 chronic and acute schizophrenic patients[1]



*Based on BPRS symptom clusters.

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- ☐ helps control symptoms in responsive patients
- ☐ dosage strengths to meet individual needs
- ☐ manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently.†

†See "Adverse Reactions" and "Actions" sections in the prescribing information on last page.

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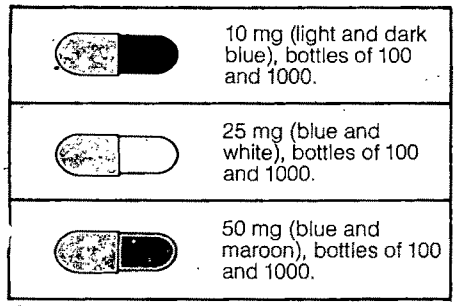
Daxolin®
(loxapine succinate

a promising neuroleptic agent for symptomatic control of schizophrenia

See next page for prescribing inform

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Description: DAXOLIN (loxapine succinate), a dibenzoxazepine compound, represents a new subclass of tricyclic antipsychotic agent, chemically distinct from the thioxanthenes, butyrophenones, and phenothiazines. Chemically, it is 2-chloro-11-(4-methyl-1-piperazinyl) dibenz[b,f][1,4] oxazepine. It is present in capsules as the succinate salt. Each 1.36 mg of loxapine succinate is equivalent to 1 mg of loxapine.

Actions: Pharmacologically, loxapine is a tranquilizer for which the exact mode of action has not been established. However, changes in the level of excitability of subcortical inhibitory areas have been observed in several animal species in association with such manifestations of tranquilization as calming effects and suppression of aggressive behavior.

In normal human volunteers, signs of sedation were seen within 20 to 30 minutes after administration, were most pronounced within 1½ to 3 hours, and lasted through 12 hours. Similar onset and duration of primary pharmacologic effect was seen in animals.

Absorption of loxapine following oral or parenteral administration is virtually complete. The drug is removed rapidly from the plasma and distributed in tissues. Animal studies suggest an initial preferential distribution in lungs, brain, spleen, heart, and kidney. Loxapine is metabolized extensively and excreted mainly in the first 24 hours. Metabolites are excreted in the urine in the form of conjugates but are unconjugated in the feces.

...ns: DAXOLIN is indicated for the manifesta... ...zophrenia.

...tions: DAXOLIN (loxapine succinate) is ... in comatose or severe drug-induced de... ...cohol, barbiturates, narcotics, etc.).

...raindicated in individuals with known ...drug.

...*nancy:* Safe use of DAXOLIN ... has not been established; ...y, in nursing mothers, or in ...ial requires that the bene... ...gainst the possible risks to ...otoxicity or teratogenicity ..., rabbits or dogs. With the ..., the highest dosage was ...mended human dose and ...as lower. Perinatal studies ...bnormalities in offspring of ...ncy with doses of 0.6 and ...roximate the usual human ...rably below the maximum

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...ilizers, may impair mental ...ecially during the first few ...mbulatory patients should ...uiring alertness (eg, oper... ...d about concomitant use ...ssants.

Precautions: DAXOLIN should be used with extreme caution in patients with a history of convulsive disorders since it lowers the convulsive threshold. Seizures have been reported in epileptic patients receiving DAXOLIN at antipsychotic dose levels, and may occur even with maintenance of routine anticonvulsant drug therapy.

Loxapine has an antiemetic effect in animals. Since this effect also may occur in man, loxapine may mask signs of overdosage of toxic drugs and obscure conditions such as intestinal obstruction and brain tumor.

DAXOLIN should be used with caution in patients with cardiovascular disease. Increased pulse rates have been reported in the majority of patients receiving antipsychotic doses; and transient hypotension has been reported. In the presence of severe hypotension requiring vasopressor therapy, the preferred drugs may be norepinephrine or angiotensin. Usual doses of epinephrine may be ineffective because of inhibition of its vasopressor effect by loxapine.

The possibility of ocular toxicity from loxapine cannot be excluded at this time. Therefore, careful observation should be made for pigmentary retinopathy and lenticular pigmentation since these have been observed in some patients receiving certain other antipsychotic drugs for prolonged periods.

Because of possible anticholinergic action, the drug should be used cautiously in patients with glaucoma or a tendency to urinary retention, particularly with concomitant administration of anticholinergic-type antiparkinsonian medication.

Adverse Reactions: *CNS Effects:* Manifestations of adverse effects on the central nervous system, other than extrapyramidal effects, have been seen infrequently. Drowsiness, usually mild, may occur at the beginning of therapy or when dosage is increased. It usually subsides with continued DAXOLIN (loxapine succinate) therapy. The incidence of sedation has been less than that of certain aliphatic phenothiazines and slightly more than the piperazine phenothiazines. Dizziness, faintness, staggering gait, muscle twitching, weakness, and confusional states have been reported.

Extrapyramidal Reactions—Neuromuscular (extrapyramidal) reactions during the administration of DAXOLIN have been reported frequently, often during the first few days of treatment. In most patients, these reactions involved parkinsonism-like symptoms such as tremor, rigidity, excessive salivation, and masked facies. Akathisia (motor restlessness) also has been reported relatively frequently. These symptoms are usually not severe and can be controlled by reduction of DAXOLIN dosage or by administration of antiparkinsonian drugs in usual dosage. Dystonic and dyskinetic reactions have occurred less frequently, but may be more severe. Dystonias include spasms of muscles of the neck and face, tongue protrusion, and oculogyric movement. Dyskinetic reaction has been described in the form of choreoathetoid movements. These reactions sometimes require reduction or temporary withdrawal of DAXOLIN dosage in addition to appropriate counteractive drugs.

Persistent Tardive Dyskinesia—In keeping with the action of all antipsychotic agents, tardive dyskinesia may appear in some patients on long-term therapy or may appear after drug therapy has been discontinued. The risk appears to be greater in elderly patients—especially females—on high-dose therapy. The symptoms are persistent and, in some patients, appear to be irreversible. The syndrome is characterized by rhythmical involuntary movement of the tongue, face, mouth, or jaw (eg, protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Sometimes these may be accompanied by involuntary movements of the extremities.

There is no known effective treatment for tardive dyskinesia; antiparkinsonian agents usually do not alleviate the symptoms of this syndrome. It is suggested that all antipsychotic agents be discontinued if these symptoms appear. Should it be necessary to reinstitute treatment, or increase the dosage of the agent, or switch to a different antipsychotic agent, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome; if the medication is stopped at that time the syndrome may not develop.

Cardiovascular Effects: Tachycardia, hypotension, hypertension, light-headedness, and syncope have been reported. A few cases of ECG changes similar to those seen with phenothiazines have been reported. It is not known whether these were related to loxapine administration.

Skin Effects: Dermatitis, edema (puffiness of face), pruritus, and seborrhea have been reported with loxapine. The possibility of photosensitivity and/or photoxicity occurring has not been excluded; skin rashes of uncertain etiology have been observed in a few patients during hot summer months.

Endocrine Effects: No endocrine abnormalities have been reported.

Anticholinergic Effects: Dry mouth, nasal congestion, constipation, and blurred vision have occurred; these are more likely to occur with concomitant use of antiparkinsonian agents.

Other Adverse Reactions: Nausea, vomiting, weight gain, weight loss, dyspnea, ptosis, hyperpyrexia, flushed facies, headache, paresthesia, and polydipsia have been reported in some patients.

Dosage and Administration: DAXOLIN (loxapine succinate) is administered orally, usually in divided doses, two to four times a day. Daily dosage (in terms of base equivalents) should be adjusted to the individual patient's needs as assessed by the severity of symptoms and previous history of response to antipsychotic drugs. Initial dosage of 10 mg twice daily is recommended although, in severely disturbed patients, initial dosage up to a total of 50 mg daily may be desirable. Dosage should then be increased fairly rapidly over the first seven to ten days until there is effective control of psychotic symptoms. The usual therapeutic and maintenance range is 60 mg to 100 mg daily. However, as with other antipsychotic drugs, some patients respond to lower dosage and others require higher dosage for optimal benefit. Daily dosage higher than 250 mg is not recommended. For maintenance therapy, dosage should be reduced to the lowest level compatible with symptom control; many patients have been maintained satisfactorily at dosages in the range of 20 mg to 60 mg daily.

How Supplied: DAXOLIN™ (loxapine succinate) is supplied in the following base-equivalent strengths:
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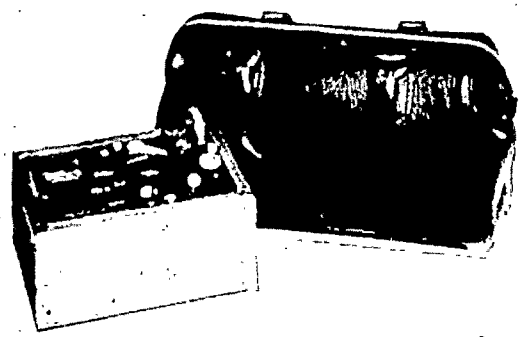
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